

**THE PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA**

**DOCKET NO. 2021-324-WS**

IN RE: Application of Kiawah Island Utility, ) **DIRECT TESTIMONY**  
 Incorporated to File Proposed Changes )  
 in Rates, Charges, Classifications ) **OF**  
 and/or Regulations for Water and )  
 Sewer Service. ) **CHARLES LOY**

## I. INTRODUCTION

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Charles Loy. My principal place of business is 919 Congress Avenue, Suite 1110, Austin, Texas 78701.

**Q. WHAT IS YOUR CURRENT POSITION?**

A. I am a Principal with GDS Associates, Inc. (“GDS”). GDS is an engineering and consulting firm that provides rate and regulatory consulting services in the electric, natural gas, and water utility industries. GDS also provides a variety of other services in the utility industry including power supply planning, generation support services, financial analysis, load forecasting, and statistical services. Our clients are primarily publicly owned utilities, municipalities, customers of privately-owned utilities, and government agencies. GDS has offices located in nine states across the USA.

**Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.**

1 A. I received the Bachelors of Business Administration degree with a concentration in  
2 accounting from the University of Texas at Austin. I am a Certified Public Accountant  
3 in the State of Texas. Before joining GDS in June of 2001, I was General Manager of  
4 Rates and Regulatory Affairs of AquaSource Inc. (“AquaSource”), a wholly owned  
5 water and wastewater subsidiary of DQE, a publicly traded electric utility located in  
6 Pittsburgh, Pennsylvania. My responsibilities included the organization, preparation  
7 and management of various rate filings and testimony in connection with rate requests  
8 and other regulatory matters in the twelve states in which AquaSource owned and  
9 operated utility properties. Before joining AquaSource, I was a Manager of Regulatory  
10 Affairs for Citizens Utilities Company – Public Services Sector. I was responsible for  
11 various regulatory matters, including rate cases, for water/wastewater, gas, and electric  
12 services in eight states. Before joining Citizens, I was a Rate Manager with Southern  
13 Union Gas, where I prepared rate filings, cost-of-service studies, and testimony for the  
14 various jurisdictions in Texas and Oklahoma. My utility regulation experience began  
15 with Diversified Utility Consultants as a Senior Analyst where I assisted in the review  
16 and analysis of various gas, electric, and water company rate filings.

17 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

18 A. Yes, I have. I have also testified before other regulatory commissions in various  
19 jurisdictions. Included in Appendix A to this testimony is information about the  
20 dockets in which I have filed testimony or actively participated.

1    **Q.     WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

2    A.     Kiawah Island Utility, Inc. ("KIU" or "Company") engaged GDS Associates to develop  
3           the cost-of-service study (COSS or "study") for its water and sewer services for the  
4           twelve-month period ending December 31, 2020.

5    **Q.     PLEASE DESCRIBE THE SCOPE OF YOUR WORK TO DEVELOP THE KIU**  
6           **COSS.**

7    A.     The COSS is based on KIU revenue requirement schedules and supporting work papers  
8           for the Test Year ending December 31, 2020. I reviewed these schedules, KIU's general  
9           accounting records, and other selected records and exhibits, as part of developing the  
10          COSS. I also reviewed monthly financial information and participated in conversations  
11          with management personnel and other witnesses to discuss accounting and financial  
12          issues and operating matters. The resulting water and sewer retail COSS is presented  
13          as Exhibits 1 and 2 to this testimony.

14               **II.     WATER & SEWER COST OF SERVICE STUDY ("COSS")**

15    **Overview**

16    **Q.     WHAT IS THE PURPOSE OF THE COSS?**

17    A.     The final step in the preparation of a rate case is the determination of the applicable  
18           rates to be charged to customers for utility service. Once the utility's total revenue  
19           requirement is determined, the revenue requirement for each customer class must be  
20           determined. The class COSS provides a basis for allocating costs to the various classes.  
21           Finally, rates are designed to recover the revenues from each class. The premise of the  
22           COSS is that each customer class should pay its cost of providing service. The

1 assignment of costs to the various classes is accomplished by developing various  
2 allocators using the utility's expenses, investments, and operating statistics.

3 **WATER COSS**

4 **Q. WHAT METHOD OF COST ALLOCATION DID YOU USE IN THE**  
5 **COMPANY'S WATER COSS?**

6 A. The study is founded on the Base-Extra Capacity method that functionalizes costs by  
7 Commodity, Demand, and Customer as prescribed by the American Water Works  
8 Association ("AWWA") Manual M1, "Principles of Water Rates, Fees and Charges,"  
9 published in 2017 and prior editions of the manual. The COSS study maintains the  
10 current rate classes and rate structure established in previous cases for KIU in which  
11 the meter charges are dependent on the size of meter (and not distinguished by customer  
12 class) but, by contrast, the volumetric rate is dependent on the specific customer class.  
13 Where meter sizes are not used, such as in the case of room count for the Hotel class,  
14 the existing billing determinants were maintained.

15 **Q. BRIEFLY DESCRIBE THE CONVENTIONAL COSS APPROACH.**

16 A. Typically, the method allocates the individual cost of service items into various cost  
17 functions such as:

- 18 • Commodity – variable costs attributable to the amount of water sold. Includes  
19 power costs as well as chemicals purchased to treat and pump water to the  
20 distribution system.
- 21 • Demand – operating and capital costs associated with facilities that provide  
22 peak demands on the system, including wells, pumping plant, transmission and

1 distribution mains, and storage tanks. These costs are separated into maximum  
2 day and maximum hour costs.

- 3 • Customer – costs arising from the distribution of water to the customer at the  
4 point of connection. These costs are separated into customer meter and  
5 customer service classes. This function also includes billing, collection and  
6 meter reading or costs associated with printing and mailing customers' bills,  
7 costs associated with collecting the payments and the labor and materials related  
8 to reading meters each month.

- 9 • Fire Service – costs that are attributed to the provision of capacity in the system  
10 to meet fire demands, and service to fire lines and hydrants. These costs are  
11 separated into private fire and public fire service functions.

12 **Q. PLEASE DISCUSS KIU'S APPROACH TO THE WATER RETAIL COSS**  
13 **PRESENTED IN THIS FILING.**

14 A. The approach to the KIU study is somewhat different from the typical study because of  
15 the unique characteristics of the KIU system. In addition, KIU does not have  
16 documentation of any previous studies, so there are not any past practices or approaches  
17 influencing existing rates that require consideration. The KIU COSS generally follows  
18 traditional COSS concepts in that it maintains the Commodity, Demand, and Customer  
19 functions. However, the KIU water study divides the Commodity function into two  
20 functions, that is, "O&M" and "Water". Also, the KIU water COSS includes a separate  
21 "Well" functionalization since it represents a specific service to one customer, that is,  
22 raw water irrigation to a Golf course, from a single well. Finally, private fire protection

1 costs are not functionalized but established as a separate customer class with a proxy  
2 of two hours of usage per year.

3 **Q. PLEASE EXPLAIN THE TWO COMMODITY FUNCTIONS, O&M AND**  
4 **WATER.**

5 A. The need to split commodity costs between the O&M and Water functions arises from  
6 the fact that one customer is receiving non-potable water service as described above.  
7 The costs associated with purchasing and treating water cannot be allocated to this  
8 customer. The use of the Commodity Water function, which includes purchased water  
9 expense and power for the treatment plant, ensures that these costs are not allocated to  
10 non-potable customers.

11 **Q. PLEASE ADDRESS HOW THE MAXIMUM DAY, MAXIMUM HOUR AND**  
12 **CUSTOMER CLASS DEMAND FACTORS WERE DEVELOPED FOR THE**  
13 **KIU WATER COSS.**

14 A. I applied the methodology supported in the AWWA Manual M1, "Principles of Water  
15 Rates, Fees and Charges," Appendix A "Development of Peaking Factors by Customer  
16 Class". A three-year (2018-2020) average of the purchase water daily flows was used  
17 to develop the max day demand factor for the water system. The customer class demand  
18 factors were developed from a three-year (2018-2020) average of customer billing  
19 statistics.

1   **Q.   DO YOU BELIEVE THE PROPOSED DEMAND FACTORS ARE**  
2   **REASONABLE?**

3   **A.**   Yes. I believe the proposed demand factors fall within reasonable demand factor ranges  
4       for each of the customer classes presented in the COSS.

5   **Q.   PLEASE DESCRIBE EACH OF THE WATER COSS SCHEDULES**  
6   **PRESENTED IN EXHIBIT 1.**

7   **A.**   There are three main schedules that make up the Water COSS. The first, titled “Water  
8       Class Revenue Requirement Summary” shows the revenues produced by current rates,  
9       allocated revenues from miscellaneous and other services, the expenses allocated to  
10      each class by category, the current net operating income/loss, and the increase that  
11      would be necessary to bring each class to the actual cost of service indicated by the  
12      study.

13           The second schedule, titled “Water Revenue Requirement Component  
14      Functionalization” shows the application of functionalization factors to individual  
15      components of the revenue requirement. Column (f) contains the code for the relevant  
16      functionalization factor, for which a full description and the relative and absolute values  
17      used for the functionalization can be found on the “W-Funct Factors” WP.

18           The third schedule is titled “Water Revenue Requirement Component  
19      Allocation”. In this schedule, the functionalized costs at the component level (operating  
20      expenses, depreciation & amortization expense, etc.) are allocated to the customer  
21      classes. For all expenses functionalized to Commodity O&M, the relevant allocation  
22      factor is “RD Use”, the basis of which is the distribution of volumes billed annually.

1 For Commodity Water functionalized costs the same basis is used but as discussed  
2 above, the portion of volumes associated with customers taking water from wells is  
3 excluded. The development of the Max Day and Max Hour functionalization were  
4 described briefly above, and information supporting the calculations can be found on  
5 the workpaper titled "Water Usage Summary Workpaper (Includes Golf System)". In  
6 order to determine the max day and max hour usage, the factors found on line numbers  
7 5 and 7 are applied. Commercial customers are likely to be closed overnight and  
8 portions of weekends, and the max day factor on line 5 recognizes the fact that the  
9 usage for these customers occurs over a smaller number of hours than customers of the  
10 Hotel or Commercial classes which will have consistent usage patterns throughout the  
11 week. Irrigation and well customers are excluded from these costs as they unlikely to  
12 be watering at the time that the system is experiencing significant demand.

13 The two remaining allocation factors used are "Customers" and "Wells". The  
14 "Customers" allocation factor assigns costs in proportion to the number of customers  
15 existing on the system, while the "Wells" allocation factor assigns costs directly to the  
16 irrigation customer taking non-potable service. The calculation of the water allocation  
17 factors is shown on the workpaper titled "Water Allocation Factor Development  
18 Workpaper", which has been provided to the parties to this case in discovery.

## 19 **RESULTS OF WATER COSS**

### 20 **Q. PLEASE ADDRESS THE RESULTS OF THE WATER COSS.**

21 A. Table 1 below provides the results of the water COSS. The results show that all classes  
22 need a rate increase with the exception being the Hotel class, which indicates a rate



1 decrease. The irrigation related classes require the largest increase, which seems to  
 2 suggest that they are receiving more subsidies than the other classes. The proposed  
 3 distribution of the water revenue increase is addressed in Section III below.

	Residential	Commercial	Hotel	Irrigation	Golf - Potable	Golf - Well Water	Fire Proxy	Total
Current Revenues	\$ 4,558,957	\$ 532,758	\$ 96,245	\$ 1,909,722	\$ 210,158	\$ 106,769	\$ 11,015	\$ 7,425,625
COSS Revenues	4,965,472	556,437	83,477	2,268,293	276,031	256,294	12,416	8,418,421
COSS Increase - \$	\$ 406,515	\$ 23,680	\$ (12,768)	\$ 358,571	\$ 65,873	\$ 149,525	\$ 1,400	\$ 992,796
COSS Increase - %	8.92%	4.44%	-13.27%	18.78%	31.34%	140.05%	12.71%	13.37%

## 5 SEWER COSS

6 **Q. WHAT GUIDANCE DID YOU RELY ON WHEN DEVELOPING THE KIU**  
 7 **SEWER COSS?**

8 A. I generally followed the guidance offered in the Water Environment Federation's  
 9 Manual of Practice No. 27 or "Financing and Charges for Wastewater Systems". The  
 10 manual provides a general overview of the current practices and procedures that should  
 11 be considered when developing charges for wastewater collection and treatment  
 12 systems.

13 **Q. PLEASE ADDRESS THE COST FUNCTIONS ESTABLISHED IN THE**  
 14 **SEWER COSS FOR CUSTOMER CLASS ALLOCATIONS.**

15 A. Four cost functions were identified as follows:

- 16 • Volume or costs that are incurred for typical day flows or volumes.
- 17 • Max Day or demand related costs that drive the need for additional
- 18 capacity to accommodate maximum-day flows.

- 1 • Customer or those costs associated with billing, collection, and
- 2 customer support.
- 3 • Effluent, those costs directly related to the effluent system. Again, like
- 4 the Well function described in the Water COSS above, this function
- 5 relates to a specific unique service to one customer or reclaimed
- 6 wastewater used for irrigation of the golf course.

7 **Q. PLEASE ADDRESS HOW THE MAX DAY AND OTHER CUSTOMER CLASS**  
8 **DEMAND FACTORS WERE DEVELOPED FOR THE KIU SEWER COSS.**

9 **A.** A three-year (2018-2020) average of the sewer treatment plant daily flows were used  
10 to develop the max day demand factor. The customer class demand factors were  
11 developed from a three-year (2018-2020) average of customer billing statistics.

12 **Q. DO YOU BELIEVE THE PROPOSED DEMAND FACTORS ARE**  
13 **REASONABLE?**

14 **A.** Yes. I believe the proposed demand factors fall within reasonable demand factor ranges  
15 for each of the customer classes presented in the COSS.

16 **Q. PLEASE DESCRIBE EACH OF THE SEWER COSS SCHEDULES.**

17 **A.** The sewer COSS schedules follow the same format as the water schedules described  
18 above. The schedule titled "Sewer Class Revenue Requirement Summary" shows the  
19 revenues produced by current rates, allocated revenues from miscellaneous and other  
20 services, the expenses allocated to each class by category, the current net operating  
21 income/loss, and the increase that would be necessary to bring each class to the actual  
22 cost of service indicated by the study.

1           The “Sewer Revenue Requirement Component Functionalization” schedule  
2 shows the functionalization of the individual components of the revenue requirement  
3 to factors described above. Support for the functionalization factors used in this  
4 schedule can be found on the workpaper titled “Sewer Functionalization Factor  
5 Development Workpaper”, which has been provided to the parties of the case in  
6 discovery.

7           The allocation of the functionalized costs to the individual classes can be found  
8 on the schedule titled “Sewer Revenue Requirement Component Allocation”. Much  
9 like the water allocation schedule, a consistent allocation factor is used for each  
10 function. For those costs determined to be volume-related, the costs are allocated to all  
11 of the customer classes other than the Effluent class based on their respective flows.  
12 Those that are demand-related are assigned using a methodology similar to the Max  
13 Day methodology used for water costs. Customer costs are allocated on the basis of the  
14 number of customers in each class, while effluent costs are directly assigned to the  
15 customer using effluent for irrigation purposes.

16           Workpapers supporting the functionalization and allocation factors used in the  
17 study are provided in the same file as the schedules discussed above.

18 **Q. PLEASE PROVIDE THE RESULTS OF THE SEWER COSS.**

19 A. Table 2 below provides the results of the water COSS. The sewer study suggests  
20 increases to the Residential and Effluent classes with slight decreases indicated for the  
21 Commercial and Hotel classes.

	<b>Residential</b>	<b>Commercial</b>	<b>Hotel</b>	<b>Effluent</b>	<b>Total</b>
Current Revenues	\$ 1,761,635	\$ 221,752	\$ 59,694	\$ 210,522	\$ 2,253,603
COSS Revenues	1,903,606	221,123	54,004	377,679	2,556,413
COSS Increase - \$	\$ 141,972	\$ (629)	\$ (5,690)	\$ 167,157	\$ 302,810
COSS Increase - %	8.06%	-0.28%	-9.53%	79.40%	13.44%

### III. PROPOSED WATER AND SEWER REVENUE INCREASE

#### DISTRIBUTIONS

**Q. WHAT ARE THE CONSIDERATIONS WHEN DETERMINING THE ASSIGNMENT OF THE PROPOSED REVENUE INCREASES?**

A. While the COSS can provide guidance regarding the cost to serve each class and the assignment of revenue increases, in this case strict adherence to it would result in unreasonable rate impact outcomes. There are non-cost factors that should be considered when moving customer classes toward cost of service such as fairness, bill impacts, public policy, and the promotion of certain behaviors should be considered. Toward that end, the Company developed some guiding tenets to allow each class to move closer to its actual cost of service while mitigating the overall impacts on certain customers as much as possible.

**Q. PLEASE ADDRESS THE APPROACH THE COMPANY USED TO ASSIGN THE REVENUE INCREASES.**

1 A. First, the Company formed the water and sewer customer classes into three groups of  
2 classes as follows:

3 ***Group 1: Non-Irrigation Classes -Residential, Commercial and Hotel Customers***  
4 ***Group 2: Irrigation Classes- Potable, Non-Potable Well and Effluent Customers***  
5 ***Group 3: Private Fire Customers***

6 Second, guidelines were established for each group. For instance, the COSS results for  
7 Group 1 customers resulted in either increases much lower than the overall average  
8 revenue system-wide increase or 13.58% or in a few cases a decrease. The average  
9 increase suggested by the COSS for Group 1 is approximately 8% with the Residential  
10 customers receiving proportionally higher increases than commercial or hotel  
11 customers. Guided by these results, the Company proposes that the Residential classes  
12 (both water and sewer) be increased by 9.73% and that Commercial and Hotel classes  
13 be increased by 8.57%. While this will result in these customer classes receiving higher  
14 increases than the COSS suggests, it recognizes that the Residential increases are lower  
15 than the system average and assigns a lower increase to the Commercial and Hotel  
16 classes recognizing that the COSS suggests decreases or lower increases than the  
17 Residential classes. Not assigning decreases to any class helps to mitigate the increases  
18 to the irrigation group which the water and sewer COSS assigns over 50% of the  
19 increase. The results of the Group 2 COSS customers would need increases much  
20 greater than the system average, with some Classes requiring over a 100% increase in  
21 rates to reach their cost of service. Thus, for Group 2, the Company decided to maintain  
22 a cap in the increase of approximately two times the average system increases, or an  
23 increase of 28.4% for both water and sewer revenues, which is slightly over two times.

1 While the relative increases in some classes are large, the corresponding dollar  
2 increases are relatively small in relation to the overall revenue requirement. Finally, we  
3 recommend that revenues from private fire customers in Group 3 be increased by  
4 14.22%, in line with the overall system cost of service increase.

5 **Q. THE COMPANY'S PROPOSAL SHIFTS ABOUT 16% OF THE SEWER**  
6 **INCREASE OVER TO WATER. IS THIS REASONABLE?**

7 A. Yes. Basically, the water irrigation class is subsidizing the other irrigation classes,  
8 including the sewer effluent class. This approach mitigates the effluent rates and helps  
9 provide a more reasonable blended irrigation rate to the Golf Course customer who also  
10 owns the Hotel.

#### 11 **IV. PROPOSED RATE DESIGN AND BILL IMPACTS**

##### 12 **OVERVIEW**

13 **Q. IS THE COMPANY PROPOSING ANY CHANGES TO THE CURRENT**  
14 **WATER AND SEWER RATE STRUCTURES?**

15 A. No. The Company proposes to maintain the current rate structure for both the water  
16 and sewer rates. The rates will continue to consist of fixed charges and volumetric  
17 charges. The billing determinants for the fixed charges will remain the same, meter  
18 size, room counts, etc. The billing volumetric determinants and usage tiers will remain  
19 the same as well. Witness Becky Dennis will provide in her direct testimony additional  
20 detail regarding the context of this rate structure.

1    **WATER**

2    **Q.     PLEASE ADDRESS THE RATE DESIGN THE COMPANY PROPOSES FOR**  
3       **THE WATER RATE STRUCTURES.**

4    A.     The schedule titled “Water Proposed Rate Design” included in Exhibit 1 shows the  
5           increases to the fixed and variable rates of each customer class. The fixed rates for  
6           Residential and Commercial water have been increased uniformly at 15.18% with the  
7           recovery of the remainder of the increase volumetrically. The Residential tier increases  
8           are all uniform at 5.18% with the Commercial single tier increase at 4.03%. Similarly,  
9           the Hotel fixed rates are increased 11.17% and the volumetric rates increased at 6.3%.  
10          This proposed approach slightly increases the fixed ratio, which helps to stabilize  
11          revenue by mitigating the impacts of volumetric fluctuations that occur with higher-  
12          than-normal rainfall or drought. The irrigation classes fixed and volumetric rates were  
13          increased uniformly. Since irrigation water use is mostly discretionary, an increase to  
14          the volumetric rates should encourage water conservation. The bill impacts of the  
15          proposed water rate design are provided in Exhibit 3, an excerpt of which is provided  
16          below specifically relating to residential customers.

**Table 4. Residential Water Bills and Impacts by Usage Levels**

<b>5/8" Residential Customer</b>	<b>Current</b>	<b>Proposed</b>	<b>Increase \$</b>	<b>Increase %</b>
<b>Rate Impacts</b>				
Base Rate	\$ 36.65	\$ 42.21	\$ 5.56	15.17%
Tier 1 Rate (per 1,000 Gallons, up to 11,000 Gallons/Mo.)	4.83	5.08	0.25	5.18%
Tier 2 Rate (per 1,000 Gallons, from 11,000 to 50,000 Gallons/Mo.)	5.37	5.65	0.28	5.21%
Tier 3 Rate (per 1,000 Gallons, over 50,000 Gallons/Mo.)	5.71	6.01	0.30	5.25%
<b>Bill Impacts</b>				
3,000 Gallons	\$ 51.14	\$ 57.45	\$ 6.31	12.34%
4,000 Gallons	55.97	62.53	6.56	11.72%
5,000 Gallons	60.80	67.61	6.81	11.20%
6,000 Gallons	65.63	72.69	7.06	10.76%
7,000 Gallons	70.46	77.77	7.31	10.37%
8,000 Gallons	75.29	82.85	7.56	10.04%
9,000 Gallons	80.12	87.93	7.81	9.75%
10,000 Gallons	84.95	93.01	8.06	9.49%
11,000 Gallons	89.78	98.09	8.31	9.26%
12,000 Gallons	95.15	103.74	8.59	9.03%
13,000 Gallons	100.52	109.39	8.87	8.82%
14,000 Gallons	105.89	115.04	9.15	8.64%
15,000 Gallons	111.26	120.69	9.43	8.48%

**SEWER**

**Q. PLEASE ADDRESS THE RATE DESIGN THE COMPANY PROPOSES FOR THE SEWER RATE STRUCTURES?**

**A.** The schedule titled "Sewer Proposed Rate Design" included in Exhibit 2 shows the increases to the fixed and variable components of the sewer rates are all uniform and follow the revenue increase percentages assigned. This approach maintains the fixed ratios and encourages water conservation. The bill impacts of the proposed sewer rate design are provided fully in Exhibit 4, an excerpt of which is provided below specifically relating to residential customers.



**Table 4. Residential Sewer Bills and Impacts by Usage Levels**

<b>5/8" Residential Customer</b>	<b>Current</b>	<b>Proposed</b>	<b>Increase \$</b>	<b>Increase %</b>
<b>Rate Impacts</b>				
Base Rate	\$ 28.00	\$ 30.72	\$ 2.72	9.71%
Tier 1 Rate (per 1,000 Gallons, up to 11,000 Gallons/Mo.)	0.74	0.81	0.07	9.46%
All Other Gallons	-	-	-	n/a
<b>Bill Impacts</b>				
3,000 Gallons	\$ 30.22	\$ 33.15	\$ 2.93	9.70%
4,000 Gallons	30.96	33.96	3.00	9.69%
5,000 Gallons	31.70	34.77	3.07	9.68%
6,000 Gallons	32.44	35.58	3.14	9.68%
7,000 Gallons	33.18	36.39	3.21	9.67%
8,000 Gallons	33.92	37.20	3.28	9.67%
9,000 Gallons	34.66	38.01	3.35	9.67%
10,000 Gallons	35.40	38.82	3.42	9.66%
11,000 Gallons and Above	36.14	39.63	3.49	9.66%

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

**A. Yes, it does.**

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Class Revenue Requirement Summary

Line No.	Description	per Books	K&M Adjustments	As Adjusted	Alloc. Factor	Residential	Commercial	Hotel	Irrigation	Golf - Potable	Golf - Well Water	Fire Proxy
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	
1	<b>Utility Operating Income</b>											
2	Current Rate Income	\$ 7,167,052	\$ 192,444	\$ 7,359,496		\$ 4,518,357	\$ 528,013	\$ 95,388	\$ 1,892,715	\$ 208,287	\$ 105,818	\$ 10,917
3	Misc. Revenues	26,578	-	26,578		16,318	1,907	344	6,835	752	382	39
4	Other Water Revenues	115,301	(75,750)	39,551		24,282	2,838	513	10,172	1,119	569	59
5	<b>Total Utility Operating Income</b>	<b>7,308,931</b>	<b>116,694</b>	<b>7,425,625</b>		<b>4,558,957</b>	<b>532,758</b>	<b>96,245</b>	<b>1,909,722</b>	<b>210,158</b>	<b>106,769</b>	<b>11,015</b>
6	<b>Utility Operating Expense</b>											
7	Operating Expenses	5,396,456	(239,263)	5,157,193		3,051,081	339,115	51,817	1,472,279	161,723	73,672	7,507
8	Depreciation Expenses	623,097	157,358	780,455		454,734	52,246	7,472	174,283	28,962	61,579	1,179
9	Other Taxes	424,746	103,199	527,945		312,625	35,951	5,224	122,673	20,063	30,621	788
10	Income Taxes	15,431	387,239	402,670		234,895	26,641	3,776	93,772	13,883	29,075	628
11	<b>Total Utility Operating Expense</b>	<b>6,459,730</b>	<b>157,358</b>	<b>6,617,088</b>		<b>4,053,335</b>	<b>453,954</b>	<b>68,289</b>	<b>1,863,006</b>	<b>224,631</b>	<b>194,947</b>	<b>10,101</b>
12	<b>Net Operating Income/(Loss)</b>	<b>849,201</b>	<b>(40,664)</b>	<b>557,362</b>		<b>505,622</b>	<b>78,804</b>	<b>27,957</b>	<b>46,716</b>	<b>(14,472)</b>	<b>(88,178)</b>	<b>914</b>
13	Gain/(Loss) from Disposition of Property	(45,452)	45,452	-		-	-	-	-	-	-	-
14	Interest Expense	530,947	(192,027)	338,920		197,707	22,424	3,178	78,926	11,685	24,472	528
15	<b>Net Income/(Loss) Before Increase</b>	<b>363,706</b>		<b>218,442</b>		<b>307,915</b>	<b>56,380</b>	<b>24,779</b>	<b>(32,210)</b>	<b>(26,158)</b>	<b>(112,650)</b>	<b>386</b>
16	<b>Operating Margin Before Increase</b>	<b>4.98%</b>		<b>2.94%</b>		<b>6.75%</b>	<b>10.58%</b>	<b>25.75%</b>	<b>-1.69%</b>	<b>-12.45%</b>	<b>-105.51%</b>	<b>3.50%</b>
17	Cost of Service Base Rate Increase - \$			992,796		406,515	23,680	(12,768)	358,571	65,873	149,525	1,400
18	Cost of Service Base Rate Increase - %			13.49%		9.00%	4.48%	-13.39%	18.94%	31.63%	141.30%	12.83%
19	<b>Net Income/(Loss) After COS Increase</b>			<b>1,211,238</b>		<b>714,430</b>	<b>80,060</b>	<b>12,011</b>	<b>326,361</b>	<b>39,715</b>	<b>36,876</b>	<b>1,786</b>
20	<b>Operating Margin After COS Increase</b>			<b>14.39%</b>		<b>14.39%</b>	<b>14.39%</b>	<b>14.39%</b>	<b>14.39%</b>	<b>14.39%</b>	<b>14.39%</b>	<b>14.39%</b>

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Revenue Requirement Component Functionalization

Line No.	Acct	Description	per Books	K&M Adjustments	As Adjusted	Func. Factor	Commodity O&M	Commodity Water	Max Day	Max Hour	Customer	Well
(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1		<b>OPERATING EXPENSES</b>										
2	601.0	Salaries & Wages - O&M	\$ 281,351	\$ 15,224	\$ 296,575	OP PLT	\$ 226,594	\$ -	\$ 42,698	\$ 8,185	\$ 17,589	\$ 1,508
3	601.0	Salaries & Wages - Cust	54,604	2,955	57,558	CUST	-	-	-	-	57,558	-
4	601.0	Salaries & Wages - Admin	171,427	9,276	180,703	ADMINPR	138,064	-	26,016	4,987	10,717	919
5	603.0	Employee Pensions and Benefits O&M	75,720	19,077	94,797	OP PLT	72,428	-	13,648	2,616	5,622	482
6	604.0	Employee Pensions and Benefits-Cust	11,435	2,881	14,316	CUST	-	-	-	-	14,316	-
7	604.0	Employee Pensions and Benefits-Admin	25,421	6,405	31,825	ADMINPR	24,316	-	4,582	878	1,888	162
8	610.0	Purchased Water	3,246,841	238,229	3,485,070	COM WATER	-	3,485,070	-	-	-	-
9	615.0	Purchased Power Water Plant	123,643	16,352	139,995	COM WATER	-	139,995	-	-	-	-
10	616.0	Fuel for Power Production	-	-	-	N/A	-	-	-	-	-	-
11	618.0	Chemicals	2,218	-	2,218	COM WATER	-	2,218	-	-	-	-
12	620.0	Materials and Supplies	189,010	(75,750)	113,260	OP PLT	86,535	-	16,306	3,126	6,717	576
13	631.0	Contractual Services - Engineering	-	-	-	ADMIN	-	-	-	-	-	-
14	632.0	Contractual Services - Accounting	14,271	200	14,471	ADMIN	9,881	-	1,862	357	2,306	66
15	633.0	Contractual Services - Legal	188,483	(185,139)	3,344	ADMIN	2,283	-	430	82	533	15
16	634.0	Contractual Services - Management Fees	651,699	(257,903)	393,796	TOT OM X MGMT	56,187	312,599	10,588	2,030	12,018	374
17	635.0	Contractual Services - Testing	-	-	-	N/A	-	-	-	-	-	-
18	636.0	Contractual Services - Other	-	-	-	ADMINPR	-	-	-	-	-	-
19	650.0	Transportation Expense	18,739	-	18,739	ADMIN	12,795	-	2,411	462	2,986	85
20	658.0	Insurance - Workman's Compensation	7,324	-	7,324	ADMINPR	5,596	-	1,054	202	434	37
21	659.0	Insurance - Other	48,559	-	48,559	ADMIN	33,155	-	6,248	1,198	7,738	221
22	666.0	Reg Expenses - Amort of Rate Case Exp	-	-	-	N/A	-	-	-	-	-	-
23	667.0	Regulatory Commission Expenses	87,132	(28,062)	59,070	ADMIN	40,332	-	7,600	1,457	9,413	268
24	670.0	Bad Debt Expense	1,639	-	1,639	CUST	-	-	-	-	1,639	-
25	675.0	Miscellaneous Expenses	196,940	(3,006)	193,934	OM X MISC	92,909	59,670	17,507	3,356	19,873	618
26		<b>Total Operating Expenses</b>	<b>5,396,456</b>	<b>(239,263)</b>	<b>5,157,193</b>		<b>801,074</b>	<b>3,999,551</b>	<b>150,951</b>	<b>28,936</b>	<b>171,349</b>	<b>5,332</b>
26		Subtotal: O&M Excluding Management Fee	4,744,757	18,640	4,763,397		651,977	3,627,283	122,856	23,550	139,458	4,339
27		Subtotal: O&M Excluding Misc. & Purchased Water	1,952,675	(474,486)	1,478,189		708,165	454,812	133,443	25,580	151,476	4,713
28		<b>DEPRECIATION AND AMORTIZATION</b>										
29	403.0	Depreciation	\$ 579,841	\$ 158,130	\$ 737,971	DEPR EXP	\$ 550,935	\$ 5,754	\$ 94,091	\$ 16,211	\$ 56,668	\$ 14,313
30	406.0	Amort of Water Rights	43,256	(22,294)	20,962	COM WATER	-	20,962	-	-	-	-
		Other Amortization	-	21,522	21,522	TOT OM	3,343	16,691	630	121	715	22
31		<b>Total Depreciation and Amortization</b>	<b>623,097</b>	<b>157,358</b>	<b>780,455</b>		<b>554,278</b>	<b>43,407</b>	<b>94,721</b>	<b>16,332</b>	<b>57,383</b>	<b>14,335</b>
32		<b>TAXES OTHER THAN INCOME TAXES</b>										
33	408.1	Property Taxes	\$ 287,924	\$ 86,789	\$ 374,713	OP PLT	\$ 286,295	\$ -	\$ 53,948	\$ 10,341	\$ 22,224	\$ 1,906
34	408.1	Payroll Taxes - O&M	22,035	1,765	23,800	ADMINPR	18,184	-	3,427	657	1,412	121
35	408.1	Payroll Taxes - Cust	4,606	369	4,975	CUST	-	-	-	-	4,975	-
36	408.1	Payroll Taxes - Admin	14,345	1,149	15,494	ADMINPR	11,838	-	2,231	428	919	79
37	408.1	Other Taxes	95,837	13,126	108,963	TOT OM	16,925	84,504	3,189	611	3,620	113
38		<b>Total Other Taxes</b>	<b>424,746</b>	<b>103,199</b>	<b>527,945</b>		<b>333,242</b>	<b>84,504</b>	<b>62,795</b>	<b>12,037</b>	<b>33,149</b>	<b>2,218</b>
39		<b>FEDERAL AND STATE INCOME TAXES</b>										
40		Federal Income Taxes	\$ (4,589,162)	\$ 4,911,137	\$ 321,975	RB	\$ 249,270	\$ 8,278	\$ 25,665	\$ 10,133	\$ 26,627	\$ 2,002
41		State Income Taxes	(959,604)	1,040,299	80,695	RB	62,473	2,075	6,432	2,540	6,673	502
42		Deferred Federal Income Tax	4,681,887	(4,681,887)	-	RB	-	-	-	-	-	-
43		Deferred State Income Tax	882,310	(882,310)	-	RB	-	-	-	-	-	-
44		<b>Total Income Taxes</b>	<b>15,431</b>	<b>387,239</b>	<b>402,670</b>		<b>311,743</b>	<b>10,352</b>	<b>32,098</b>	<b>12,673</b>	<b>33,301</b>	<b>2,503</b>
45		<b>INTEREST EXPENSE</b>										
46	427.3	Interest Expense	\$ 530,947	\$ (192,027)	\$ 338,920	RB	262,389	8,713	27,016	10,666	28,028	2,107
47		<b>Total Interest Expense</b>	<b>530,947</b>	<b>(192,027)</b>	<b>338,920</b>		<b>262,389</b>	<b>8,713</b>	<b>27,016</b>	<b>10,666</b>	<b>28,028</b>	<b>2,107</b>

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Revenue Requirement Component Allocation

Line No.	Description	per Books	K&M Adjustments	As Adjusted	Alloc. Factor	Residential	Commercial	Hotel	Irrigation	Golf - Potable	Golf - Well Water	Fire Proxy
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	
1	<b>Operating Expenses</b>											
2	Commodity O&M			801,074	RD Use	429,194	47,350	7,574	225,851	21,896	68,222	986
3	Commodity Water			3,999,551	RD Use X Well	2,342,335	258,414	41,337	1,232,587	119,500	-	5,378
4	Max Day			150,951	Max Day Excl Irrigation	115,046	16,370	2,405	-	16,956	-	174
5	Max Hour			28,936	Max Hour Excl. Irrigatic	22,063	3,139	461	-	3,252	-	20
6	Customer			171,349	Customers	142,442	13,841	40	13,841	119	119	949
7	Well			5,332	Wells	-	-	-	-	-	5,332	-
8	<b>Total Operating Expenses</b>	<b>5,396,456</b>	<b>(239,263)</b>	<b>5,157,193</b>		<b>3,051,081</b>	<b>339,115</b>	<b>51,817</b>	<b>1,472,279</b>	<b>161,723</b>	<b>73,672</b>	<b>7,507</b>
9	Check Total	-	-	-								
10	<b>Depreciation &amp; Amortization Expense</b>											
11	Commodity O&M			554,278	RD Use	296,968	32,762	5,241	156,271	15,151	47,204	682
12	Commodity Water			43,407	RD Use X Well	25,421	2,805	449	13,377	1,297	-	58
13	Max Day			94,721	Max Day Excl Irrigation	72,191	10,272	1,509	-	10,640	-	109
14	Max Hour			16,332	Max Hour Excl. Irrigatic	12,453	1,772	260	-	1,835	-	11
15	Customer			57,383	Customers	47,702	4,635	13	4,635	40	40	318
16	Well			14,335	Wells	-	-	-	-	-	14,335	-
17	<b>Total Depreciation &amp; Amortization Expen</b>	<b>623,097</b>	<b>157,358</b>	<b>780,455</b>		<b>454,734</b>	<b>52,246</b>	<b>7,472</b>	<b>174,283</b>	<b>28,962</b>	<b>61,579</b>	<b>1,179</b>
18	Check Total	-	-	-								
19	<b>Taxes Other than Income Taxes</b>											
20	Commodity O&M			333,242	RD Use	178,542	19,697	3,151	93,953	9,109	28,380	410
21	Commodity Water			84,504	RD Use X Well	49,490	5,460	873	26,042	2,525	-	114
22	Max Day			62,795	Max Day Excl Irrigation	47,858	6,810	1,000	-	7,053	-	72
23	Max Hour			12,037	Max Hour Excl. Irrigatic	9,178	1,306	192	-	1,353	-	8
24	Customer			33,149	Customers	27,557	2,678	8	2,678	23	23	184
25	Well			2,218	Wells	-	-	-	-	-	2,218	-
26	<b>Total Taxes Other than Income Taxes</b>	<b>424,746</b>	<b>103,199</b>	<b>527,945</b>		<b>312,625</b>	<b>35,951</b>	<b>5,224</b>	<b>122,673</b>	<b>20,063</b>	<b>30,621</b>	<b>788</b>
27	Check Total	-	-	-								
28	<b>Income Taxes</b>											
29	Commodity O&M			311,743	RD Use	167,024	18,427	2,948	87,892	8,521	26,549	384
30	Commodity Water			10,352	RD Use X Well	6,063	669	107	3,190	309	-	14
31	Max Day			32,098	Max Day Excl Irrigation	24,463	3,481	511	-	3,605	-	37
32	Max Hour			12,673	Max Hour Excl. Irrigatic	9,663	1,375	202	-	1,424	-	9
33	Customer			33,301	Customers	27,683	2,690	8	2,690	23	23	184
34	Well			2,503	Wells	-	-	-	-	-	2,503	-
35	<b>Total Income Taxes</b>	<b>15,431</b>	<b>387,239</b>	<b>402,670</b>		<b>234,895</b>	<b>26,641</b>	<b>3,776</b>	<b>93,772</b>	<b>13,883</b>	<b>29,075</b>	<b>628</b>
36	Check Total	-	-	-								
37	<b>Interest Expense</b>											
38	Commodity O&M			262,389	RD Use	140,581	15,509	2,481	73,977	7,172	22,346	323
39	Commodity Water			8,713	RD Use X Well	5,103	563	90	2,685	260	-	12
40	Max Day			27,016	Max Day Excl Irrigation	20,590	2,930	430	-	3,035	-	31
41	Max Hour			10,666	Max Hour Excl. Irrigatic	8,133	1,157	170	-	1,199	-	7
42	Customer			28,028	Customers	23,300	2,264	6	2,264	19	19	155
43	Well			2,107	Wells	-	-	-	-	-	2,107	-
44	<b>Total Interest Expense</b>	<b>530,947</b>	<b>(192,027)</b>	<b>338,920</b>		<b>197,707</b>	<b>22,424</b>	<b>3,178</b>	<b>78,926</b>	<b>11,685</b>	<b>24,472</b>	<b>528</b>
45	Check Total	-	-	-								

KAIAWA ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Functionalization Factor Development Worksheet

Line No.	Description	Factor Code	Total	Commodity O&M	Commodity Water	Max Day	Max Hour	Customer	Well
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
1	<b>Absolute Factors</b>								
2	Commodity Operations and Maintenance Direct	COM O&M	1	1	-	-	-	-	-
3	Commodity Water Direct	COM WATER	1	-	1	-	-	-	-
4	Max Day Functionalization Factor	MAX DAY	1	0.64	-	0.36	-	-	-
5	Max Hour Functionalization Factor	MAX HR	1	0.24	-	0.38	0.39	-	-
6	Customer Direct	CUST	1	-	-	-	-	1	-
7	Wells Direct	WELL	1	-	-	-	-	-	1
8	Operating Plant	OP PLT	36,831,783	28,140,838	-	5,302,736	1,016,483	2,184,429	187,298
9	Supply Plant	SUPPLY PLT	21,971,058	20,436,760	-	879,958	470,540	-	183,799
10	Transmission and Distribution Plant	TD PLT	13,970,841	7,075,974	-	4,262,073	519,499	2,113,295	-
11	Total Plant	TOT PLT	37,272,674	28,393,848	84,218	5,351,114	1,025,553	2,228,971	188,970
12	Operations and Maintenance Expense Excl. Misc. Expense	OM X MISC	1,478,189	708,165	454,812	133,443	25,580	151,476	4,713
13	Administrative Payroll	ADMINPR	296,575	226,594	-	42,698	8,185	17,589	1,508
14	Administrative Expense	ADMIN	675,774	461,402	-	86,945	16,666	107,690	3,071
15	Depreciation Expense	DEPR EXP	737,972	550,935	5,754	94,091	16,211	56,668	14,313
16	Total Operations and Maintenance Expense	TOT OM	5,157,193	801,074	3,999,551	150,951	28,936	171,349	5,332
17	Total O&M Excluding Customer Costs	TOT OM X CUST	4,985,843	801,074	3,999,551	150,951	28,936	0	5,332
18	Account 340 Asset Assignment	ACCT 340	106,517	12,843	68,844	2,994	407	21,353	75
19	Total O&M Excluding Management Fee	TOT OM X MGMT	4,569,463	651,977	3,627,283	122,856	23,550	139,458	4,339
20	Materials and Supplies	M&S	113,260	86,535	-	16,306	3,126	6,717	576
21	Net Plant Excluding CIAC	NET PLT X CIAC	24,976,416	19,376,332	6,369	2,914,352	707,103	1,832,892	139,368
22	Net Plant	NET PLT	22,002,953	17,464,942	6,369	1,852,279	707,103	1,832,892	139,368
23	Total Rate Base	RB	21,742,514	16,832,853	558,985	1,733,145	684,273	1,798,094	135,162
24	<b>Relative Factors</b>								
25	Commodity Operations and Maintenance Direct	COM O&M	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
26	Commodity Water Direct	COM WATER	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
27	Max Day Functionalization Factor	MAX DAY	100.0%	64.3%	0.0%	35.7%	0.0%	0.0%	0.0%
28	Max Hour Functionalization Factor	MAX HR	100.0%	23.5%	0.0%	37.7%	38.7%	0.0%	0.0%
29	Customer Direct	CUST	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
30	Wells Direct	WELL	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
31	Operating Plant	OP PLT	100.0%	76.4%	0.0%	14.4%	2.8%	5.9%	0.5%
32	Supply Plant	SUPPLY PLT	100.0%	93.0%	0.0%	4.0%	2.1%	0.0%	0.8%
33	Transmission and Distribution Plant	TD PLT	100.0%	50.6%	0.0%	30.5%	3.7%	15.1%	0.0%
34	Total Plant	TOT PLT	100.0%	76.2%	0.2%	14.4%	2.8%	6.0%	0.5%
35	Operations and Maintenance Expense Excl. Misc. Expense	OM X MISC	100.0%	47.9%	30.8%	9.0%	1.7%	10.2%	0.3%
36	Administrative Payroll	ADMINPR	100.0%	76.4%	0.0%	14.4%	2.8%	5.9%	0.5%
37	Administrative Expense	ADMIN	100.0%	68.3%	0.0%	12.9%	2.5%	15.9%	0.5%
38	Depreciation Expense	DEPR EXP	100.0%	74.7%	0.8%	12.7%	2.2%	7.7%	1.9%
39	Total Operations and Maintenance Expense	TOT OM	100.0%	15.5%	77.6%	2.9%	0.6%	3.3%	0.1%
40	Total O&M Excluding Customer Costs	TOT OM X CUST	100.0%	16.1%	80.2%	3.0%	0.6%	0.0%	0.1%
41	Account 340 Asset Assignment	ACCT 340	100.0%	12.1%	64.6%	2.8%	0.4%	20.0%	0.1%
42	Total O&M Excluding Management Fee	TOT OM X MGMT	100.0%	14.3%	79.4%	2.7%	0.5%	3.1%	0.1%
43	Materials and Supplies	M&S	100.0%	76.4%	0.0%	14.4%	2.8%	5.9%	0.5%
44	Net Plant Excluding CIAC	NET PLT X CIAC	100.0%	77.6%	0.0%	11.7%	2.8%	7.3%	0.6%
45	Net Plant	NET PLT	100.0%	79.4%	0.0%	8.4%	3.2%	8.3%	0.6%
46	Total Rate Base	RB	100.0%	77.4%	2.6%	8.0%	3.1%	8.3%	0.6%

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Allocation Factor Development Workpaper

Line No.	Description	Factor Code	Total	Residential	Commercial	Hotel	Irrigation	Golf - Potable	Golf - Well Water	Fire Proxy
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1	<b>Absolute Values</b>									
2	Usage	Usage	950,206	486,923	59,396	11,521	270,566	42,340	78,312	1,147
3	Usage Excluding Well Water	Usage Excl. Well	871,893	486,923	59,396	11,521	270,566	42,340		1,147
4	Wells Direct	Wells	1	-	-	-	-	-	1	-
5	Number of Customers/Bills	Customers	51,996	43,224	4,200	12	4,200	36	36	288
6	Maximum Day Class Demands	Max Day	6,946	3,272	466	68	1,932	482	721	5
7	Maximum Hour Class Demands	Max Hour	11,051	5,432	773	114	3,207	801	721	5
8	Maximum Day Class Demand Excluding Well Water	Max Day Excl. Well	6,225	3,272	466	68	1,932	482	-	5
9	Maximum Hour Class Demands Excluding Well Water	Max Hour Excl. Well	10,330	5,432	773	114	3,207	801	-	5
10	Maximum Day Excl. Irrigation and Wells	Max Day Excl Irrigatio	4,293	3,272	466	68	-	482	-	5
11	Maximum Hour Excl. Irrigation and Wells	Max Hour Excl. Irrigatio	7,123	5,432	773	114		801		5
12	Rate Design Usage Amounts	RD Use	932,507	499,613	55,119	8,817	262,907	25,489	79,415	1,147
13	Rate Design Usage Amounts Excluding Well Customer	RD Use X Well	853,092	499,613	55,119	8,817	262,907	25,489		1,147
14	[Placeholder]		-							
15	[Placeholder]		-							
16	[Placeholder]		-							
17	[Placeholder]		-							
18	[Placeholder]		-							
19	[Placeholder]		-							
20	[Placeholder]		-							
21	[Placeholder]		-							
22	<b>Relative Values</b>									
23	Usage	Usage	1.00	0.51	0.06	0.01	0.28	0.04	0.08	0.00
24	Usage Excluding Well Water	Usage Excl. Well	1.00	0.56	0.07	0.01	0.31	0.05	-	0.00
25	Wells Direct	Wells	1.00	-	-	-	-	-	1.00	-
26	Number of Customers/Bills	Customers	1.00	0.83	0.08	0.00	0.08	0.00	0.00	0.01
27	Maximum Day Class Demands	Max Day	1.00	0.47	0.07	0.01	0.28	0.07	0.10	0.00
28	Maximum Hour Class Demands	Max Hour	1.00	0.49	0.07	0.01	0.29	0.07	0.07	0.00
29	Maximum Day Class Demand Excluding Well Water	Max Day Excl. Well	1.00	0.53	0.07	0.01	0.31	0.08	-	0.00
30	Maximum Hour Class Demands Excluding Well Water	Max Hour Excl. Well	1.00	0.53	0.07	0.01	0.31	0.08	-	0.00
31	Maximum Day Excl. Irrigation and Wells	Max Day Excl Irrigatio	1.00	0.76	0.11	0.02	-	0.11	-	0.00
32	Maximum Hour Excl. Irrigation and Wells	Max Hour Excl. Irrigatio	1.00	0.76	0.11	0.02	-	0.11	-	0.00
33	Rate Design Usage Amounts	RD Use	1.00	0.54	0.06	0.01	0.28	0.03	0.09	0.00
34	Rate Design Usage Amounts Excluding Well Customer	RD Use X Well	1.00	0.59	0.06	0.01	0.31	0.03	-	0.00
35	[Placeholder]	0	-	-	-	-	-	-	-	-
36	[Placeholder]	0	-	-	-	-	-	-	-	-
37	[Placeholder]	0	-	-	-	-	-	-	-	-
38	[Placeholder]	0	-	-	-	-	-	-	-	-
39	[Placeholder]	0	-	-	-	-	-	-	-	-
40	[Placeholder]	0	-	-	-	-	-	-	-	-
41	[Placeholder]	0	-	-	-	-	-	-	-	-
42	[Placeholder]	0	-	-	-	-	-	-	-	-

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Rate Base Functionalization Workpaper

Line No.	Acct	Description	All Water	K&M Adjustments	As Adjusted	Funct. Factor	Commodity O&M	Commodity Water	Max Day	Max Hour	Customer	Well
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1		Plant in Service	\$ 33,635,021	\$ 3,637,653	\$ 37,272,674		\$ 28,393,848	\$ 84,218	\$ 5,351,114	\$ 1,025,553	\$ 2,228,971	\$ 188,970
2		Accumulated Depreciation	(11,711,794)	(584,464)	(12,296,258)		(9,017,516)	(77,849)	(2,436,762)	(318,450)	(396,079)	(49,601)
3		CIAC (Net)	(3,103,471)	130,008	(2,973,463)		(1,911,390)	-	(1,062,073)	-	-	-
4		<b>Net Plant</b>	<b>18,819,756</b>	<b>3,183,197</b>	<b>22,002,953</b>		<b>17,464,942</b>	<b>6,369</b>	<b>1,852,279</b>	<b>707,103</b>	<b>1,832,892</b>	<b>139,368</b>
5		Accumulated Deferred Income Taxes (System Allocatio	(801,110)	-	(801,110)	TOT PLT	(610,276)	(1,810)	(115,013)	(22,042)	(47,908)	(4,062)
6		Excess Deferred Income Taxes	(543,140)	-	(543,140)	TOT PLT	(413,757)	(1,227)	(77,977)	(14,944)	(32,481)	(2,754)
7		Materials and Supplies (System Allocation on M&S Exp	367,327	-	367,327	M&S	280,652	-	52,885	10,137	21,786	1,868
8		Prepayments (System Allocation on System O&M Expr	77,886	-	77,886	TOT OM	12,098	60,403	2,280	437	2,588	81
9		Cash Working Capital (System Allocation on System Oi	701,614	(63,017)	638,597	TOT OM	99,194	495,251	18,692	3,583	21,218	660
10		<b>Total Rate Base</b>	<b>18,622,334</b>	<b>3,120,180</b>	<b>21,742,514</b>		<b>16,832,853</b>	<b>558,985</b>	<b>1,733,145</b>	<b>684,273</b>	<b>1,798,094</b>	<b>135,162</b>

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Plant Functionalization Workpaper

Line No.	Acct	Description	All Water	K&M Adjustments	As Adjusted	Funct. Factor	Commodity O&M	Commodity Water	Max Day	Max Hour	Customer	Well
	(a)	(b)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
Plant Original Cost												
1	302.1	Supply Plant - Franchises - Water Rights	\$ 1,921,989	\$ -	\$ 1,921,989	COM O&M	\$ 1,921,989	\$ -	\$ -	\$ -	\$ -	\$ -
2	303.2	Supply Plant - Land and Land Rights	3,468,252	-	3,468,252	COM O&M	3,468,252	-	-	-	-	-
3	304.2	Supply Plant - Structures and Improvements	13,861,317	139,929	14,001,246	COM O&M	14,001,246	-	-	-	-	-
4	305.2	Supply Plant - Collecting and Impounding Res.	1,214,454	-	1,214,454	MAX HR	285,903	-	458,011	470,540	-	-
5	307.2	Supply Plant - Wells and Springs	183,799	-	183,799	WELL	-	-	-	-	-	183,799
6	311.2	Supply Plant - Pumping Equipment	1,111,403	69,915	1,181,318	MAX DAY	759,370	-	421,948	-	-	-
7	339.2	Supply Plant - Other Misc.	417,200	1,050	418,249	SUPPLY PLT	389,042	-	16,751	8,957	-	3,499
8	339.3	Water Treatment - Other Misc.	1,378	-	1,378	MAX DAY	886	-	492	-	-	-
9	330.4	T&D Plant - Dist. Reservoirs and SP	1,340,815	-	1,340,815	MAX HR	315,651	-	505,665	519,499	-	-
10	331.4	T&D Plant - Pumping Equipment	8,681,384	1,835,347	10,516,731	MAX DAY	6,760,324	-	3,756,407	-	-	-
11	333.4	T&D Pland - Services (1.4% of Acct 331.4)	123,265	-	123,265	CUST	-	-	-	-	123,265	-
11	334.4	T&D Plant - Meters and Installations	133,187	1,572,003	1,705,190	CUST	-	-	-	-	1,705,190	-
12	335.4	T&D Plant - Hydrants	284,840	-	284,840	CUST	-	-	-	-	284,840	-
13	339.4	T&D Plant - Other Misc.	470,257	-	470,257	TD PLT	238,177	-	143,461	17,486	71,133	-
14	304.5	General Plant - Structures and Improvements	-	-	-	OP PLT	-	-	-	-	-	-
15	340.5	General Plant - Office Equip and Imp.	115,693	14,612	130,305	ACCT 340	15,711	84,218	3,663	498	26,122	92
16	341.5	General Plant - Transportation Equip.	294,151	-	294,151	OP PLT	224,742	-	42,349	8,118	17,446	1,496
17	343.5	General Plant - Tools, Shop and Garage Equip.	10,497	-	10,497	OP PLT	8,020	-	1,511	290	623	53
18	346.5	General Plant - Communications Equip.	1,139	-	1,139	OP PLT	871	-	164	31	68	6
19	347.5	General Plant - Misc. Equipment	-	4,798	4,798	OP PLT	3,666	-	691	132	285	24
20	Total Plant Original Cost		33,635,021	3,637,653	37,272,674		28,393,848	84,218	5,351,114	1,025,553	2,228,971	188,970
21	331.4	T&D Plant - Pumping Equipment CIAC	(5,860,751)		(5,860,751)	MAX DAY	(3,767,385)	-	(2,093,366)	-	-	-
22	Total Water Plant incl. CIAC		27,774,270	3,637,653	31,411,923		24,626,463	84,218	3,257,748	1,025,553	2,228,971	188,970
21	Subtotal: Operating Plant		33,213,540	3,618,243	36,831,783		28,140,838	-	5,302,736	1,016,483	2,184,429	187,298
23	Subtotal: Supply Plant Excl. Misc.		21,761,214		21,971,058		20,436,760	-	879,958	470,540	-	183,799
24	Subtotal: T&D Plant Excl. Misc.		10,563,492	3,407,349	13,970,841		7,075,974	-	4,262,073	519,499	2,113,295	-
25	Subtotal: Plant Excl. Land		28,244,781	3,618,243	31,882,434		23,003,608	84,218	5,351,114	1,025,553	2,228,971	188,970
Accumulated Depreciation												
26	302.1	Supply Plant - Franchises - Water Rights	\$ (1,690,489)	\$ -	\$ (1,690,489)	COM O&M	\$ (1,690,489)	\$ -	\$ -	\$ -	\$ -	\$ -
27	303.2	Supply Plant - Land and Land Rights	-	-	-	COM O&M	-	-	-	-	-	-
28	304.2	Supply Plant - Structures and Improvements	(2,776,093)	(326,634)	(3,102,728)	COM O&M	(3,102,728)	-	-	-	-	-
29	305.2	Supply Plant - Collecting and Impounding Res.	(243,226)	-	(243,226)	MAX HR	(57,260)	-	(91,729)	(94,238)	-	-
30	307.2	Supply Plant - Wells and Springs	(34,878)	(12,797)	(47,674)	WELL	-	-	-	-	-	(47,674)
31	311.2	Supply Plant - Pumping Equipment	(745,507)	(52,192)	(797,699)	MAX DAY	(512,774)	-	(284,925)	-	-	-
32	339.2	Supply Plant - Other Misc.	(160,531)	(25,165)	(185,696)	SUPPLY PLT	(172,728)	-	(7,437)	(3,977)	-	(1,553)
33	339.3	Water Treatment - Other Misc.	(1,102)	(83)	(1,185)	MAX DAY	(762)	-	(423)	-	-	-
34	330.4	T&D Plant - Dist. Reservoirs and SP	(488,455)	(31,795)	(520,250)	MAX HR	(122,476)	-	(196,204)	(201,571)	-	-
35	331.4	T&D Plant - Pumping Equipment	(4,667,129)	(114,695)	(4,781,824)	MAX DAY	(3,073,833)	-	(1,707,991)	-	-	-
36	333.4	T&D Pland - Services (1.4% of Acct 331.4)	(66,268)	(1,629)	(67,896)	CUST	-	-	-	-	(67,896)	-
36	334.4	T&D Plant - Meters and Installations	(99,651)	60,800	(38,850)	CUST	-	-	-	-	(38,850)	-
37	335.4	T&D Plant - Hydrants	(186,839)	(7,301)	(194,139)	CUST	-	-	-	-	(194,139)	-
38	339.4	T&D Plant - Other Misc.	(419,092)	(28,366)	(447,458)	TD PLT	(226,629)	-	(136,506)	(16,639)	(67,685)	-
39	304.5	General Plant - Structures and Improvements	-	-	-	OP PLT	-	-	-	-	-	-
40	340.5	General Plant - Office Equip and Imp.	(112,241)	(8,209)	(120,450)	ACCT 340	(14,523)	(77,849)	(3,386)	(461)	(24,147)	(85)
41	341.5	General Plant - Transportation Equip.	(151,888)	(34,991)	(186,880)	OP PLT	(142,783)	-	(26,905)	(5,158)	(11,084)	(950)
42	343.5	General Plant - Tools, Shop and Garage Equip.	131,766	(700)	131,066	OP PLT	100,139	-	18,870	3,617	7,773	667
43	346.5	General Plant - Communications Equip.	(171)	(228)	(399)	OP PLT	(305)	-	(57)	(11)	(24)	(2)
44	347.5	General Plant - Misc. Equipment	-	(480)	(480)	OP PLT	(367)	-	(69)	(13)	(28)	(2)
45	Total Accumulated Depreciation		(11,711,794)	(584,464)	(12,296,258)		(9,017,516)	(77,849)	(2,436,762)	(318,450)	(396,079)	(49,601)
46	331.4	T&D Plant - Pumping Equipment CIAC	2,757,281	130,008	2,887,289	MAX DAY	1,855,996	-	1,031,293	-	-	-
47	Total Accumulated Depreciation and Amortization		(8,954,514)	(454,456)	(9,408,969)		(7,161,521)	(77,849)	(1,405,469)	(318,450)	(396,079)	(49,601)
46	Subtotal: Operating Plant		(11,579,260)	(539,855)	(12,119,115)		(8,959,678)	-	(2,425,214)	(316,424)	(368,570)	(49,228)
48	Subtotal: Supply Plant Excl. Misc.		(5,490,193)		(5,881,816)		(5,363,250)	-	(376,654)	(94,238)	-	(47,674)
49	Subtotal: T&D Plant Excl. Misc.		(5,508,341)	(94,618)	(5,602,959)		(3,196,309)	-	(1,904,194)	(201,571)	(300,886)	-
50	Subtotal: Plant Excl. Land		(10,021,305)	(539,855)	(10,605,769)		(7,327,027)	(77,849)	(2,436,762)	(318,450)	(396,079)	(49,601)
Net Plant												



KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Plant Functionalization Workpaper

Line No.	Acct	Description	All Water	K&M Adjustments	As Adjusted	Funct. Factor	Commodity O&M	Commodity Water	Max Day	Max Hour	Customer	Well
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
51	302.1	Supply Plant - Franchises - Water Rights	\$ 231,499	\$ -	\$ 231,499	COM O&M	\$ 231,499	\$ -	\$ -	\$ -	\$ -	-
52	303.2	Supply Plant - Land and Land Rights	3,468,252	-	3,468,252	COM O&M	3,468,252	-	-	-	-	-
53	304.2	Supply Plant - Structures and Improvements	11,085,224	(186,705)	10,898,519	COM O&M	10,898,519	-	-	-	-	-
54	305.2	Supply Plant - Collecting and Impounding Res.	971,228	-	971,228	MAX HR	228,643	-	366,282	376,302	-	-
55	307.2	Supply Plant - Wells and Springs	148,922	(12,797)	136,125	WELL	-	-	-	-	-	136,125
56	311.2	Supply Plant - Pumping Equipment	365,897	17,722	383,619	MAX DAY	246,596	-	137,023	-	-	-
57	339.2	Supply Plant - Other Misc.	256,669	(24,116)	232,553	SUPPLY PLT	216,314	-	9,314	4,980	-	1,945
58	339.3	Water Treatment - Other Misc.	276	(83)	192	MAX DAY	124	-	69	-	-	-
59	330.4	T&D Plant - Dist. Reservoirs and SP	852,359	(31,795)	820,564	MAX HR	193,175	-	309,462	317,928	-	-
60	331.4	T&D Plant - Pumping Equipment	4,014,256	1,720,652	5,734,908	MAX DAY	3,686,491	-	2,048,417	-	-	-
61	333.4	T&D Plant - Services (1.4% of Acct 331.4)	56,998	(1,629)	55,369	CUST	-	-	-	-	55,369	-
61	334.4	T&D Plant - Meters and Installations	33,537	1,632,803	1,666,340	CUST	-	-	-	-	1,666,340	-
62	335.4	T&D Plant - Hydrants	98,001	(7,301)	90,701	CUST	-	-	-	-	90,701	-
63	339.4	T&D Plant - Other Misc.	51,165	(28,366)	22,799	TD PLT	11,547	-	6,955	848	3,449	-
64	304.5	General Plant - Structures and Improvements	-	-	-	OP PLT	-	-	-	-	-	-
65	340.5	General Plant - Office Equip and Imp.	3,451	6,403	9,855	ACCT 340	1,188	6,369	277	38	1,976	7
66	341.5	General Plant - Transportation Equip.	142,263	(34,991)	107,272	OP PLT	81,959	-	15,444	2,960	6,362	546
67	343.5	General Plant - Tools, Shop and Garage Equip.	142,263	(700)	141,563	OP PLT	108,160	-	20,381	3,907	8,396	720
68	346.5	General Plant - Communications Equip.	969	(228)	741	OP PLT	566	-	107	20	44	4
69	347.5	General Plant - Misc. Equipment	-	4,318	4,318	OP PLT	3,299	-	622	119	256	22
70		<b>Total Net Plant</b>	<b>21,923,227</b>	<b>3,053,189</b>	<b>24,976,416</b>		<b>19,376,332</b>	<b>6,369</b>	<b>2,914,352</b>	<b>707,103</b>	<b>1,832,892</b>	<b>139,368</b>
71	331.4	T&D Plant - Pumping Equipment CIAC	(3,103,471)	130,008	(2,973,463)	MAX DAY	(1,911,390)	-	(1,062,073)	-	-	-
72		<b>Total Net Plant and CIAC</b>	<b>18,819,756</b>	<b>3,183,197</b>	<b>22,002,953</b>		<b>17,464,942</b>	<b>6,369</b>	<b>1,852,279</b>	<b>707,103</b>	<b>1,832,892</b>	<b>139,368</b>
71		Subtotal: Operating Plant	21,634,281	3,078,387	24,712,668		19,181,160	-	2,877,521	700,058	1,815,858	138,070
73		Subtotal: Supply Plant Excl. Misc.	16,271,021		16,089,241		15,073,510	-	503,305	376,302	-	136,125
74		Subtotal: T&D Plant Excl. Misc.	5,055,151	3,312,731	8,367,882		3,879,665	-	2,357,879	317,928	1,812,410	-
75		Subtotal: Plant Excl. Land	18,223,476	3,078,387	21,276,665		15,676,581	6,369	2,914,352	707,103	1,832,892	139,368

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Depreciation Expense Functionalization Worksheet

Line No.	Acct	Description	per Books	K&M Adjustments	As Adjusted	Funct. Factor	Commodity O&M	Commodity Water	Max Day	Max Hour	Customer	Well
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1	302.1	Supply Plant - Franchises - Water Rights					Incl. in D&A Schedule					
2	303.2	Supply Plant - Land and Land Rights	-	-	-	COM O&M	-	-	-	-	-	-
3	304.2	Supply Plant - Structures and Improvements	322,534	4,100	326,634	COM O&M	326,634	-	-	-	-	-
4	305.2	Supply Plant - Collecting and Impounding Res.	-	-	-	MAX HR	-	-	-	-	-	-
5	307.2	Supply Plant - Wells and Springs	9,397	3,400	12,797	WELL	-	-	-	-	-	12,797
6	311.2	Supply Plant - Pumping Equipment	43,347	8,845	52,192	MAX DAY	33,550	-	18,642	-	-	-
7	339.2	Supply Plant - Other Misc.	25,200	(35)	25,165	SUPPLY PLT	23,408	-	1,008	539	-	211
8	339.3	Water Treatment - Other Misc.	83	(0)	83	MAX DAY	53	-	30	-	-	-
9	330.4	T&D Plant - Dist. Reservoirs and SP	31,795	-	31,795	MAX HR	7,485	-	11,991	12,319	-	-
10	331.4	T&D Plant - Pumping Equipment	198,704	44,178	242,882	MAX DAY	156,129	-	86,754	-	-	-
11	333.4	T&D Plant - Services (1.4% of Acct 331.4)	2,821	627	3,449	CUST	-	-	-	-	3,449	-
12	331.4	T&D CIAC - Pumping Equipment	(128,188)	-	(128,188)	MAX DAY	(82,401)	-	(45,787)	-	-	-
13	333.4	T&D CIAC - Services (1.4% of Acct 331.4)	(1,820)	-	(1,820)	CUST	-	-	-	-	(1,820)	-
14	334.4	T&D Plant - Meters and Installations	4,625	30,605	35,230	CUST	-	-	-	-	35,230	-
15	335.4	T&D Plant - Hydrants	7,301	-	7,301	CUST	-	-	-	-	7,301	-
16	339.4	T&D Plant - Other Misc.	28,405	(39)	28,366	TD PLT	14,367	-	8,653	1,055	4,291	-
17	340.5	General Plant - Office Equip and Imp.	8,209	-	8,209	ACCT 340	990	5,306	231	31	1,646	6
18	341.5	General Plant - Transportation Equip.	26,658	8,333	34,991	OP PLT	26,735	-	5,038	966	2,075	178
19	343.5	General Plant - Tools, Shop and Garage Equip.	428	272	700	OP PLT	535	-	101	19	42	4
20	346.5	General Plant - Communications Equip.	171	57	228	OP PLT	174	-	33	6	14	1
21	347.5	General Plant - Misc. Equipment	172	308	480	OP PLT	367	-	69	13	28	2
22		<b>Total Depreciation Expense</b>	<b>579,842</b>	<b>100,652</b>	<b>680,494</b>		<b>508,025</b>	<b>5,306</b>	<b>86,762</b>	<b>14,949</b>	<b>52,254</b>	<b>13,198</b>
23		Allocated Overhead	-		57,478	DEPR EXP	42,910	448	7,328	1,263	4,414	1,115
24		Depreciation Expense Including Overhead	<b>579,842</b>	<b>100,652</b>	<b>737,972</b>		<b>550,935</b>	<b>5,754</b>	<b>94,091</b>	<b>16,211</b>	<b>56,668</b>	<b>14,313</b>

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Account 340.5 Functionalization Workpaper

Line No.	Acct	Description	All Water	K&M Adjustments	As Adjusted	Funct. Factor	Commodity O&M	Commodity Water	Max Day	Max Hour	Customer	Well
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	
1	340.5	2 Tables & 8 Folding Chairs	\$ 127	\$ -	127	TOT OM	\$ 20	\$ 99	4	\$ 1	4	\$ 0
2	340.5	3 File Cabinets	638	-	638	TOT OM	99	495	19	4	21	1
3	340.5	6 Remotes	80	-	80	TOT OM	12	62	2	0	3	0
4	340.5	Accounting Computer	532	-	532	TOT OM	83	412	16	3	18	1
5	340.5	Antenna Tower	1,335	-	1,335	TOT OM	207	1,035	39	7	44	1
6	340.5	Antero Data Port	1,215	-	1,215	TOT OM	189	942	36	7	40	1
7	340.5	Appliances	1,116	-	1,116	TOT OM	173	866	33	6	37	1
8	340.5	AS/400 Billing System	6,059	-	6,059	CUST	-	-	-	-	6,059	-
9	340.5	AS/400 Desk Top Scanner	575	-	575	CUST	-	-	-	-	575	-
10	340.5	AS/400 Upgrade	6,160	-	6,160	CUST	-	-	-	-	6,160	-
11	340.5	AS400 upgrade and conversion	5,198	-	5,198	CUST	-	-	-	-	5,198	-
12	340.5	Backflow Software	2,433	-	2,433	MAX DAY	1,564	-	869	-	-	-
13	340.5	Billing Printer	607	-	607	CUST	-	-	-	-	607	-
14	340.5	Computers & Monitors	1,232	-	1,232	TOT OM	191	956	36	7	41	1
15	340.5	Dell Computer	921	-	921	TOT OM	143	714	27	5	31	1
16	340.5	Dell Computer - Billing	659	-	659	CUST	-	-	-	-	659	-
17	340.5	Dell Computer - Randy	434	-	434	TOT OM	67	336	13	2	14	0
18	340.5	Dell Laptop - Becky	933	-	933	TOT OM	145	723	27	5	31	1
19	340.5	File Cabinet	276	-	276	TOT OM	43	214	8	2	9	0
20	340.5	Fixtures	5,053	-	5,053	TOT OM	785	3,919	148	28	168	5
21	340.5	Furniture	2,252	-	2,252	TOT OM	350	1,747	66	13	75	2
22	340.5	GIS System	8,433	-	8,433	TOT OM X CUST	1,355	6,765	255	49	-	9
23	340.5	HP 4050N laser printer	898	-	898	TOT OM	139	696	26	5	30	1
24	340.5	IBM 133mhz pentium / Dock Station	3,222	-	3,222	TOT OM	501	2,499	94	18	107	3
25	340.5	IBM 90mhz pentium /Dock Station Monitor	3,296	-	3,296	TOT OM	512	2,556	96	18	110	3
26	340.5	IBM Server	14,021	-	14,021	TOT OM	2,178	10,874	410	79	466	14
27	340.5	Lab equipment	13,541	-	13,541	COM WATER	-	13,541	-	-	-	-
27	340.5	Mats	156	-	156	TOT OM	24	121	5	1	5	0
28	340.5	Nortel Phone System	4,645	-	4,645	TOT OM	721	3,602	136	26	154	5
29	340.5	Office Network Equipment	17,257	-	17,257	TOT OM	2,681	13,383	505	97	573	18
30	340.5	Safe	111	-	111	TOT OM	17	86	3	1	4	0
31	340.5	Scanner	600	-	600	TOT OM	93	465	18	3	20	1
32	340.5	Security Monitor	265	-	265	OP PLT	203	-	38	7	16	1
33	340.5	Software/maint. USTI	2,237	-	2,237	TOT OM	347	1,735	65	13	74	2
34		<b>Total 340.5</b>	<b>106,517</b>	<b>-</b>	<b>106,517</b>		<b>12,843</b>	<b>68,844</b>	<b>2,994</b>	<b>407</b>	<b>21,353</b>	<b>75</b>

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Max Day and Max Hour Demand Factor Workpaper

Line No.	Description	Total	Commodity O&M	Commodity Water	Max Day	Max Hour	Customer	Well
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Average Day	2.49						
2	Max Day	3.99						
3	System Max Day Factor	1.60	0.64	-	0.36	-	-	-
4	Max Hour	10.59	0.24	-	0.38	0.39	-	-

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water 3-Year Daily Flow Workpaper (Includes Golf System)

Line No.	Description	January	February	March	April	May	June	July	August	September	October	November	December
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	Day 01	1.41	1.36	1.53	1.66	3.00	3.19	3.54	3.58	3.13	3.27	2.96	2.29
2	Day 02	1.86	1.32	1.40	2.19	2.58	3.28	3.97	3.51	2.90	3.18	2.62	2.14
3	Day 03	1.50	1.44	1.49	2.14	2.40	2.93	3.85	2.84	2.78	3.22	2.93	2.11
4	Day 04	1.70	1.39	1.36	2.12	2.31	3.31	3.44	2.99	2.61	3.67	2.71	1.98
5	Day 05	1.70	1.45	1.44	2.24	2.57	3.32	3.66	2.94	2.49	3.12	2.70	2.09
6	Day 06	1.68	1.52	1.38	2.18	2.67	3.21	3.34	3.12	2.73	3.17	2.47	2.10
7	Day 07	1.70	1.38	1.46	2.14	3.42	3.18	3.38	3.34	2.79	2.86	2.62	1.77
8	Day 08	1.51	1.43	1.60	2.18	3.03	2.83	3.26	3.29	2.93	2.97	2.72	2.30
9	Day 09	1.50	1.41	1.72	2.06	2.56	3.04	3.31	3.40	2.87	2.75	2.45	1.82
10	Day 10	1.51	1.39	1.96	2.02	2.80	3.15	3.08	3.36	3.06	2.75	2.70	2.01
11	Day 11	1.59	1.34	1.96	2.05	2.83	3.02	3.15	3.29	2.43	3.04	2.55	1.86
12	Day 12	1.74	1.36	1.64	2.19	2.83	2.74	3.36	3.54	2.63	2.94	2.59	1.79
13	Day 13	1.35	1.46	1.58	2.01	3.47	2.97	3.30	3.25	2.62	2.80	2.47	1.85
14	Day 14	1.42	1.35	1.76	2.20	3.47	3.42	3.32	3.05	2.63	2.83	2.20	1.71
15	Day 15	1.37	1.34	1.83	2.02	3.49	3.16	3.28	3.02	2.57	3.05	2.42	1.84
16	Day 16	1.45	1.38	1.67	2.15	2.83	2.98	3.21	3.45	2.68	2.91	2.16	1.64
17	Day 17	1.50	1.43	1.64	2.16	3.53	3.03	3.01	3.36	2.99	2.93	2.38	1.64
18	Day 18	1.37	1.37	1.75	2.34	3.45	3.19	3.08	3.38	3.28	2.90	2.35	1.78
19	Day 19	1.57	1.29	1.82	2.29	3.09	3.13	3.31	3.04	3.92	2.55	2.40	1.72
20	Day 20	1.52	1.54	1.76	2.29	2.82	3.05	3.20	3.07	3.97	2.82	2.17	1.65
21	Day 21	1.40	1.35	1.82	2.26	2.97	3.34	3.27	3.02	3.66	2.93	2.30	1.44
22	Day 22	1.48	1.50	1.85	2.09	3.08	3.24	3.40	3.15	2.73	3.13	2.54	1.50
23	Day 23	1.44	1.43	1.72	2.20	3.13	3.14	3.31	3.28	2.95	2.82	2.27	1.35
24	Day 24	1.36	1.57	1.84	2.43	3.38	3.31	3.25	2.99	3.41	3.03	2.45	1.45
25	Day 25	1.36	1.44	1.93	2.24	3.21	3.40	3.15	3.09	3.17	3.07	2.42	1.51
26	Day 26	1.46	1.42	2.08	2.75	2.98	3.51	3.44	3.20	3.81	2.62	2.44	1.73
27	Day 27	1.70	1.48	2.02	2.20	2.49	3.51	3.50	3.19	3.61	2.87	2.14	1.64
28	Day 28	1.50	1.57	1.94	2.33	3.20	3.99	3.54	2.96	3.40	2.60	2.38	1.56
29	Day 29	1.43	1.28	2.13	2.28	2.78	3.52	3.45	3.00	3.46	2.97	2.36	1.60
30	Day 30	1.43		2.07	3.35	3.08	3.47		3.21	3.14	2.76	1.69	1.57
31	Day 31	1.35		2.47		2.37		3.50	3.06		2.90		1.57
32	Month Total	46.853	40.999	54.610	66.754	91.825	96.556	104.273	98.968	91.339	91.422	73.528	54.992
33	Maximum Day	1.862	1.573	2.475	3.347	3.532	3.992	3.972	3.580	3.973	3.672	2.957	2.301
34	Minimum Day	1.348	1.275	1.362	1.661	2.310	2.738	3.009	2.837	2.429	2.554	1.693	1.349
35	Avg. Day	1.511	1.414	1.762	2.225	2.962	3.219	3.364	3.193	3.045	2.949	2.451	1.774

**KIAWAH ISLAND UTILITY, INC.**  
**Test Year Ending December 31, 2020**  
Water Usage Summary Workpaper (Includes Golf System)

Line No.	Description	Total	Residential	Commercial	Hotel	Irrigation	Golf - Potable	Golf - Well Water	Fire Proxy
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
1	Total Volumes Billed	950,206	486,923	59,396	11,521	270,566	42,340	78,312	1,147
2	Average Day Volumes	2,601.52	1,333.12	162.62	31.54	740.77	115.92	214.41	3.14
3	Average Day Max Month Volumes	4,095.75	1,979.34	252.76	41.38	1,168.53	291.72	435.94	3.14
4	Max Month / Avg Day Factor	1.57	1.48	1.55	1.31	1.58	2.52	2.03	1.00
5	Weekly Usage Adjustment		1.05	1.17	1.05	1.05	1.05	1.05	1.00
6	Max Day Factor		2.45	2.86	2.17	2.61	4.16	3.36	1.57
7	Estimated Max Hour Coincidence Factor		1.66	1.66	1.66	1.66	1.66	1.00	1.00
8	Peak Hour Factor		4.07	4.75	3.60	4.33	6.91	3.36	1.57
9	Max Day Class Allocation - Absolute	6,945.54	3,272.03	465.59	68.40	1,931.68	482.24	720.65	4.94
10	Max Day Class Allocation - Relative	100%	47%	7%	1%	28%	7%	10%	0%
11	Max Day/Avg. Day Factor	2.67	2.45	2.86	2.17	2.61	4.16	3.36	1.57
12	Max Hour Class Allocation - Absolute	11,050.69	5,431.57	772.88	113.54	3,206.58	800.52	720.65	4.94
13	Max Hour Class Allocation - Relative	100%	49%	7%	1%	29%	7%	7%	0%
14	Max Day/Avg. Day Factor	4.25	4.07	4.75	3.60	4.33	6.91	3.36	1.57

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Usage Detail Workpaper

No.	Description	January	February	March	April	May	June	July	August	September	October	November	December
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	Residential Water Usage												
2	Up to 11k Gallons	21,213	16,662	18,484	27,598	32,806	33,230	41,015	38,342	34,941	33,121	30,430	25,277
3	11k-50k Gallons	4,946	3,333	4,041	7,529	11,595	12,704	17,950	15,472	13,666	13,506	10,017	6,617
4	Over 50k Gallons	532	129	377	739	872	999	2,395	1,683	1,395	1,691	1,003	613
5	Total Residential Water Usage	26,691	20,124	22,901	35,867	45,273	46,932	61,360	55,498	50,002	48,318	41,450	32,507
6	Avg Daily Usage	861.0	712.4	738.8	1,195.6	1,460.4	1,564.4	1,979.3	1,790.2	1,666.7	1,558.6	1,381.7	1,048.6
7	Commercial Water Usage												
8	Total Gallons x 1,000	2,894	2,592	3,045	3,802	4,871	5,408	7,836	7,300	6,816	6,722	4,822	3,288
9	Avg Daily Usage	93.4	91.8	98.2	126.7	157.1	180.3	252.8	235.5	227.2	216.8	160.7	106.1
10	Hotel Water Usage												
11	Total Gallons x 1,000	697	953	685	843	900	857	1,283	1,224	1,074	948	1,100	957
12	Avg Daily Usage	22.5	33.7	22.1	28.1	29.0	28.6	41.4	39.5	35.8	30.6	36.7	30.9
13	Irrigation												
14	Total Gallons x 1,000	9,616	7,724	8,517	14,868	27,661	29,989	36,224	34,722	32,282	29,635	24,633	14,696
15	Avg Daily Usage	310.2	273.4	274.7	495.6	892.3	999.6	1,168.5	1,120.1	1,076.1	956.0	821.1	474.1
16	Golf - Potable Water												
17	Total Gallons x 1,000	64	109	933	1,049	8,511	6,710	9,043	6,351	7,208	2,075	179	108
18	Avg Daily Usage	2.1	3.9	30.1	35.0	274.5	223.7	291.7	204.9	240.3	66.9	6.0	3.5
19	Golf - Well Water												
20	Total Gallons x 1,000	280	305	3,048	4,627	12,721	13,078	11,125	11,062	10,995	7,017	2,500	1,553
21	Avg Daily Usage	9.0	10.8	98.3	154.2	410.4	435.9	358.9	356.8	366.5	226.4	83.3	50.1
22	Fire Proxy												
23	Total Gallons x 1,000	97	89	97	94	97	94	97	97	94	97	94	97
24	Avg Daily Usage	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
25	System Total Billed Inc. Well Water												
26	Total Gallons x 1,000	40,340	31,895	39,226	61,151	100,034	103,070	126,968	116,254	108,471	94,812	74,778	53,206
27	Avg Daily Usage	1,301.3	1,129.0	1,265.4	2,038.4	3,226.9	3,435.7	4,095.8	3,750.1	3,615.7	3,058.4	2,492.6	1,716.3
28	System Total Billed Excl. Well Water												
29	Total Gallons x 1,000	40,060	31,591	36,178	56,524	87,313	89,992	115,843	105,191	97,476	87,795	72,278	51,653
30	Avg Daily Usage	1,292.2	1,118.3	1,167.0	1,884.1	2,816.6	2,999.7	3,736.9	3,393.3	3,249.2	2,832.1	2,409.3	1,666.2
31	Fire Usage Proxy	GPM	2-Hr Flow	Meter Eqs.	Weighted Flow								
32	2" Line	160	19,200	15	288,000								
33	3" Line	350	42,000	1	42,000								
34	4" Line	630	75,600	7	529,200								
35	8" Line	2,400	288,000	1	288,000								
36	Total				1,147,200								
37	Total Daily kGal				3.14								

**KIAWAH ISLAND UTILITY, INC.**  
**Test Year Ending December 31, 2020**  
Water Proposed Rate Design

Docket No. 2021-324-WS  
Direct Testimony of Charles Loy  
Exhibit 1 - Water COSS Schedules  
Page 15 of 16

Line No.	Description	Annualized Value	Current Rate	Current Revenues	Proposed Rates	Proposed Revenues	Incr./ (Decr.) Absolute	Incr./ (Decr.) Relative
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	<b>Residential</b>							
2	5/8" Meter	34,836	\$ 36.65	\$ 1,276,739	42.21	\$ 1,470,564	\$ 193,824	15.18%
3	3/4 Meter	5,784	54.98	318,004	63.33	366,281	48,277	15.18%
4	1" Meter	4,140	91.62	379,307	105.53	436,890	57,583	15.18%
5	1 1/2" Meter	180	183.25	32,985	211.07	37,993	5,008	15.18%
6	2" Meter	84	293.21	24,630	337.72	28,369	3,739	15.18%
7	3" Meter	-	641.40	-	738.77	-	-	0.00%
8	4" Meter	-	1,840.73	-	2,120.17	-	-	0.00%
9	Consumption to 11,000 gals/mo.	370,176	4.83	1,787,950	5.08	1,880,494	92,544	5.18%
10	Consumption 11,000-50,000 gals/mo.	118,657	5.37	637,188	5.65	670,169	32,981	5.18%
11	Consumption over 50,000 gals/mo	10,780	5.71	61,554	6.01	64,740	3,186	5.18%
12	<b>Total Residential Customers</b>			<b>4,518,357</b>		<b>4,955,499</b>	<b>437,142</b>	<b>9.67%</b>
13	<b>Target Revenues</b>					<b>4,957,855</b>		
14	<b>Difference</b>					<b>(2,356)</b>		
15	<b>Commercial</b>							
16	5/8" Meter	528	36.65	19,351	42.21	22,289	2,938	15.18%
17	3/4 Meter	180	54.98	9,896	63.33	11,399	1,502	15.18%
18	1" Meter	168	91.62	15,392	105.53	17,729	2,337	15.18%
19	1 1/2" Meter	204	183.25	37,383	211.07	43,058	5,675	15.18%
20	2" Meter	192	293.21	56,296	337.72	64,843	8,546	15.18%
21	3" Meter	48	641.40	30,787	738.77	35,461	4,674	15.18%
22	4" Meter	24	1,840.73	44,178	2,120.17	50,884	6,707	15.18%
23	Consumption	55,119	5.71	314,729	5.94	327,407	12,677	4.03%
24	<b>Total Commercial Customers</b>			<b>528,013</b>		<b>573,070</b>	<b>45,056</b>	<b>8.53%</b>
25	<b>Target Revenues</b>					<b>573,264</b>		
26	<b>Difference</b>					<b>(194)</b>		
27	<b>Hotels</b>							
28	per Room	3,060	14.72	45,043	16.36	50,073	5,030	11.17%
29	Consumption	8,817	5.71	50,345	6.07	53,519	3,174	6.30%
30	<b>Total Hotels</b>			<b>95,388</b>		<b>103,592</b>	<b>8,204</b>	<b>8.60%</b>
31	<b>Target Revenues</b>					<b>103,563</b>		
32	<b>Difference</b>					<b>29</b>		
33	<b>Irrigation</b>							
34	5/8" Meter	2,328	36.65	85,315	47.06	109,545	24,230	28.40%
35	3/4 Meter	1,044	54.98	57,395	70.59	73,696	16,300	28.40%
36	1" Meter	1,380	91.62	126,441	117.65	162,350	35,909	28.40%
37	1 1/2" Meter	312	183.25	57,173	235.29	73,411	16,237	28.40%
38	2" Meter	300	293.21	87,963	376.48	112,945	24,982	28.40%
39	3" Meter	48	641.40	30,787	823.56	39,531	8,744	28.40%
40	4" Meter	-	1,840.73	-	2,363.50	-	-	0.00%
41	Consumption to 50,000 gals/mo	157,541	5.37	845,995	6.90	1,086,258	240,263	28.40%
42	Consumption over 50,000 gals/mo	105,366	5.71	601,640	7.33	772,506	170,866	28.40%
43	<b>Total Irrigation Customers</b>			<b>1,892,711</b>		<b>2,430,240</b>	<b>537,530</b>	<b>28.40%</b>
44	<b>Target Revenues</b>					<b>2,430,246</b>		
45	<b>Difference</b>					<b>(6)</b>		
46	<b>Golf - Potable</b>							
47	Potable Water	48	871.45	41,830	1,118.94	53,709	11,880	28.40%
48	Consumption - Potable	25,489	5.71	145,542	7.33	186,876	41,334	28.40%
49	<b>Total Golf - Potable</b>			<b>187,372</b>		<b>240,585</b>	<b>53,214</b>	<b>28.40%</b>
50	<b>Target Revenues</b>					<b>240,585</b>		
51	<b>Difference</b>					<b>-</b>		
52	<b>Golf - Well Water</b>							
53	Deep Well Water	36	1,138.80	40,997	1,462.22	52,640	11,643	28.40%
54	Consumption - Well	79,415	0.30	23,825	0.39	30,591	6,766	28.40%
55	<b>Total Golf - Well Water</b>			<b>64,821</b>		<b>83,231</b>	<b>18,409</b>	<b>28.40%</b>
56	<b>Target Revenues</b>					<b>83,231</b>		
57	<b>Difference</b>					<b>-</b>		
58	<b>Fire Line</b>							



KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Water Proposed Rate Design

Line No.	Description		Annualized Value	Current Rate	Current Revenues	Proposed Rates	Proposed Revenues	Incr./ (Decr.) Absolute	Incr./ (Decr.) Relative
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
59	2" Line		252	8.65	2,179	9.88	2,489	310	14.22%
60	3" Line		84	15.83	1,330	18.08	1,519	189	14.22%
61	4" Line		180	27.43	4,938	31.34	5,640	702	14.22%
62	6" Line		24	54.87	1,317	62.67	1,504	187	14.22%
63	8" Line		12	96.11	1,153	109.78	1,317	164	14.22%
64	Total Fire Line				10,917		12,469	1,552	14.22%
65	Target Revenues						12,470		
66	Difference						-		
67	Fire Hydrant Service								
68	Fire Hydrant	497	5,964	6.63	39,551	6.63	39,551	-	0.00%
69	Total Fire Hydrant				39,551		39,551	-	0.00%
70	TOTAL RATE REVENUES				7,337,130		8,438,238	1,101,108	13.05%
71	TOTAL REVENUE TARGET						8,440,765		
72	DIFFERENCE						(2,527)		

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Class Revenue Requirement Summary

Line No.	Description	per Books	K&M Adjustments	As Adjusted	Alloc. Factor	Residential	Commercial	Hotel	Effluent
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
1	<b>Utility Operating Income</b>								
2	Current Rate Income	\$ 2,115,582	\$ 129,115	\$ 2,244,697		\$ 1,754,673	\$ 220,876	\$ 59,458	\$ 209,690
3	Misc. Revenues	52,656	(43,750)	8,906		6,962	876	236	832
4	Other Water Revenues	-	-	-		-	-	-	-
5	<b>Total Operating Income</b>	<b>2,168,238</b>	<b>85,365</b>	<b>2,253,603</b>		<b>1,761,635</b>	<b>221,752</b>	<b>59,694</b>	<b>210,522</b>
6	<b>Utility Operating Expense</b>								
7	Operating Expenses	1,492,300	(320,047)	1,172,253		915,281	102,811	24,155	130,007
8	Depreciation and Amortization Expenses	271,637	130,519	402,156		255,106	30,732	7,821	108,497
9	Other Taxes	294,366	67,622	361,988		271,497	33,282	8,545	48,664
10	Income Taxes	(13,782)	109,867	96,085		75,117	8,415	1,971	10,581
11	<b>Total Utility Operating Expense</b>	<b>2,044,521</b>	<b>(12,039)</b>	<b>2,032,482</b>		<b>1,517,002</b>	<b>175,240</b>	<b>42,492</b>	<b>297,749</b>
12	<b>Net Operating Income/(Loss)</b>	<b>123,717</b>	<b>97,404</b>	<b>221,121</b>		<b>244,633</b>	<b>46,513</b>	<b>17,202</b>	<b>(87,227)</b>
13	Gain/(Loss) from Disposition of Property	611	(611)	-	n/a	-	-	-	-
14	Interest Expense	367,966	(133,057)	234,909		171,387	20,884	5,407	37,231
15	<b>Net Income/(Loss) Before Increase</b>	<b>(243,638)</b>	<b>229,850</b>	<b>(13,788)</b>		<b>73,246</b>	<b>25,629</b>	<b>11,795</b>	<b>(124,458)</b>
16	<b>Operating Margin Before Increase</b>	<b>-11.24%</b>		<b>-0.61%</b>		<b>4.16%</b>	<b>11.56%</b>	<b>19.76%</b>	<b>-59.12%</b>
17	Cost of Service Base Rate Increase - \$			302,810		141,972	(629)	(5,690)	167,157
18	Cost of Service Base Rate Increase - %			13.49%		8.09%	-0.28%	-9.57%	79.72%
19	<b>Net Income/(Loss) After COS Increase</b>			<b>289,022</b>		<b>215,217</b>	<b>25,000</b>	<b>6,106</b>	<b>42,699</b>
20	<b>Operating Margin After COS Increase</b>			<b>11.31%</b>		<b>11.31%</b>	<b>11.31%</b>	<b>11.31%</b>	<b>11.31%</b>

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Revenue Requirement Component Functionalization

Line No.	Acct	Description	per Books	K&M Adjustments	As Adjusted	Funct. Factor	Volume	Max Day	Customer	Effluent
(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
<b>OPERATING EXPENSES</b>										
1	701.0	Salaries & Wages - O&M	\$ 184,573	\$ 9,985	\$ 194,558	O&M PLT	\$ 49,054	\$ 118,383	\$ 213	\$ 26,907
2	701.0	Salaries & Wages - Cust	54,604	2,954	57,558	CUST	-	-	57,558	-
3	701.0	Salaries & Wages - Admin	112,460	6,084	118,544	ADMIN PAY	23,065	55,664	27,164	12,652
4	704.0	Employee Pensions and Benefits - O&M	40,951	7,661	48,613	O&M PLT	12,257	29,580	53	6,723
5	704.0	Employee Pensions and Benefits - Cust	12,115	1,758	13,872	CUST	-	-	13,872	-
6	704.0	Employee Pensions and Benefits - Admin	24,952	10,234	35,185	ADMIN PAY	6,846	16,522	8,062	3,755
7	710.0	Purchased Wastewater Treatment	-	11,330	11,330	VOLUME	11,330	-	-	-
8	711.0	Sludge Removal Expense	5,000	-	5,000	VOLUME	5,000	-	-	-
9	715.0	Purchased Power	141,571	-	141,571	O&M PLT	35,694	86,142	155	19,579
10	718.0	Chemicals	6,282	-	6,282	VOLUME	6,282	-	-	-
11	720.0	Materials and Supplies	58,986	(43,750)	15,236	ADMIN PAY	2,964	7,154	3,491	1,626
12	731.0	Contractual Services - Engineering	-	-	-	O&M PLT	-	-	-	-
13	732.0	Contractual Services - Accounting	9,890	139	10,029	PRM&S	2,361	4,853	1,712	1,103
14	733.0	Contractual Services - Legal	130,626	(128,284)	2,342	PRM&S	551	1,133	400	258
15	734.0	Contractual Services - Management Fees	451,653	(178,703)	272,950	PRM&S	64,258	132,080	46,592	30,020
16	736.0	Contractual Services - Other	-	-	-	O&M PLT	-	-	-	-
17	750.0	Transportation Expenses	12,988	-	12,988	ADMIN PAY	2,527	6,099	2,976	1,386
18	758.0	Insurance - Workmans Comp	5,076	-	5,076	ADMIN PAY	988	2,383	1,163	542
19	759.0	Insurance - Other	48,559	-	48,559	PRM&S	11,432	23,498	8,289	5,341
20	765.0	Regulatory Commission Expenses	60,385	(19,455)	40,930	O&M PLT	10,320	24,905	45	5,661
21	770.0	Bad Debt Expense	1,639	-	1,639	CUST	-	-	1,639	-
22	775.0	Miscellaneous Expenses	129,991	-	129,991	PRM&S	30,602	62,902	22,189	14,297
23		<b>Total Operating Expense</b>	<b>1,492,300</b>	<b>(320,047)</b>	<b>1,172,253</b>		<b>275,531</b>	<b>571,298</b>	<b>195,574</b>	<b>129,849</b>
24		Subtotal: PMR&S	1,492,300	(320,047)	1,172,253		275,531	571,298	195,574	129,849
<b>DEPRECIATION AND AMORT. EXPENSE</b>										
26	403.0	Depreciation Expenses	271,637	78,658	350,295	DEPR. EXP	164,683	76,302	6,529	102,781
27	406.0	Amortization of Utility Plant Acquisition Adjustments	-	-	-	N/A	-	-	-	-
28	407.0	Amortization Expense - Other	-	51,861	51,861	PRM&S	12,209	25,095	8,852	5,704
29		<b>Total Depr. &amp; Amort. Expense</b>	<b>271,637</b>	<b>130,519</b>	<b>402,156</b>		<b>176,892</b>	<b>101,398</b>	<b>15,381</b>	<b>108,484</b>
<b>TAXES OTHER THAN INCOME TAXES</b>										
31	408.1	Property Taxes	199,543	60,137	259,680	O&M PLT	65,473	158,009	285	35,913
32	408.1	Payroll Taxes O&M	14,414	1,155	15,569	RB	11,270	1,619	213	2,467
33	408.1	Payroll Taxes Cust	4,606	369	4,975	RB	3,601	517	68	788
34	408.1	Payroll Taxes Admin	9,384	752	10,136	RB	7,337	1,054	139	1,606
35	408.1	Other Taxes and Licenses	66,419	5,210	71,629	PRM&S	16,863	34,661	12,227	7,878
36		<b>Total Taxes Other than Income Taxes</b>	<b>294,366</b>	<b>67,622</b>	<b>361,988</b>		<b>104,543</b>	<b>195,859</b>	<b>12,932</b>	<b>48,654</b>
<b>FEDERAL AND STATE INCOME TAXES</b>										
38		Federal Income Taxes	4,098,564	(4,021,735)	76,829	PRM&S	18,087	37,177	13,115	8,450
39		State Income Taxes	857,019	(837,763)	19,256	PRM&S	4,533	9,318	3,287	2,118
40		Deferred Federal Income Tax	(4,181,377)	4,181,377	-	PRM&S	-	-	-	-
41		Deferred State Income Tax	(787,988)	787,988	-	PRM&S	-	-	-	-
42		<b>Total Income Taxes</b>	<b>(13,782)</b>	<b>109,867</b>	<b>96,085</b>		<b>22,620</b>	<b>46,495</b>	<b>16,401</b>	<b>10,568</b>
<b>INTEREST EXPENSE</b>										
44	427.1	Interest on Debt to Associated Companies	367,966	(133,057)	234,909	RB	170,038	24,423	3,220	37,228
45		<b>Total Interest Expense</b>	<b>367,966</b>		<b>234,909</b>		<b>170,038</b>	<b>24,423</b>	<b>3,220</b>	<b>37,228</b>

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Revenue Requirement Component Allocation

Line No.	Description	(a)	per Books (b)	K&M Adjustments (c)	As Adjusted (d)	Alloc. Factor (e)	Residential (f)	Commercial (g)	Hotel (h)	Effluent (i)
1	<b>Operating Expenses</b>									
2	Volumes				\$ 275,531	Base Usage	\$ 238,704	\$ 29,209	\$ 7,618	\$ -
3	Max Day				571,298	Max Day	492,177	62,637	16,484	-
4	Customer				195,574	Customers	184,400	10,964	52	157
5	Effluent				129,849	Effluent	-	-	-	129,849
6	<b>Total Operating Expenses</b>		<b>1,492,300</b>	<b>(320,047)</b>	<b>1,172,253</b>		<b>915,281</b>	<b>102,811</b>	<b>24,155</b>	<b>130,007</b>
7	Check Total		-	-	-					
8	<b>Depreciation &amp; Amortization Expense</b>									
9	Volumes				176,892	Base Usage	\$ 153,249	\$ 18,752	\$ 4,891	\$ -
10	Max Day				101,398	Max Day	87,355	11,117	2,926	-
11	Customer				15,381	Customers	14,503	862	4	12
12	Effluent				108,484	Effluent	-	-	-	108,484
13	<b>Total Depreciation &amp; Amortization Expense</b>		<b>271,637</b>	<b>130,519</b>	<b>402,156</b>		<b>255,106</b>	<b>30,732</b>	<b>7,821</b>	<b>108,497</b>
14	Check Total		-	-	-					
15	<b>Taxes Other than Income Taxes</b>									
16	Volumes				104,543	Base Usage	\$ 90,570	\$ 11,083	\$ 2,891	\$ -
17	Max Day				195,859	Max Day	168,734	21,474	5,651	-
18	Customer				12,932	Customers	12,193	725	3	10
19	Effluent				48,654	Effluent	-	-	-	48,654
20	<b>Total Taxes Other than Income Taxes</b>		<b>294,366</b>	<b>67,622</b>	<b>361,988</b>		<b>271,497</b>	<b>33,282</b>	<b>8,545</b>	<b>48,664</b>
21	Check Total		-	-	-					
22	<b>Income Taxes</b>									
23	Volumes				22,620	Base Usage	\$ 19,597	\$ 2,398	\$ 625	\$ -
24	Max Day				46,495	Max Day	40,056	5,098	1,342	-
25	Customer				16,401	Customers	15,464	920	4	13
26	Effluent				10,568	Effluent	-	-	-	10,568
27	<b>Total Income Taxes</b>		<b>(13,782)</b>	<b>109,867</b>	<b>96,085</b>		<b>75,117</b>	<b>8,415</b>	<b>1,971</b>	<b>10,581</b>
28	Check Total		(13,782)	109,867	96,085					
29	<b>Interest Expense</b>									
30	Volumes				170,038	Base Usage	\$ 147,311	\$ 18,026	\$ 4,701	\$ -
31	Max Day				24,423	Max Day	21,040	2,678	705	-
32	Customer				3,220	Customers	3,036	181	1	3
33	Effluent				37,228	Effluent	-	-	-	37,228
34	<b>Total Interest Expense</b>		<b>367,966</b>	<b>-</b>	<b>234,909</b>		<b>171,387</b>	<b>20,884</b>	<b>5,407</b>	<b>37,231</b>
35	Check Total		-	-	-					

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Functionalization Factor Development Workpaper

Line No.	Description	Factor Code	Total	Volume	Max Day	Customer	Effluent
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	<b>Absolute Factors</b>						
2	Volume Direct	VOLUME	1	1	-	-	-
3	Max Day Direct	MAX DAY	1	-	1	-	-
4	Customer Direct	CUST	1	-	-	1	-
5	Effluent	EFFLUENT	1	-	-	-	1
6	Gross Plant Excluding Customer	PLT XCUST	-	-	-	-	-
7	Administrative Payroll	ADMIN PAY	252,115	49,054	118,383	57,771	26,907
8	Interest Expense	INT	-	-	-	-	-
9	Operating Plant	O&M PLT	21,417,203	5,399,925	13,031,828	23,472	2,961,979
10	Operating Plant Excluding Effluent	OMPLT X EFF	18,455,224	5,399,925	13,031,828	23,472	-
11	PRM&S	PRM&S	647,749	152,493	313,445	110,569	71,242
12	Test Function	Test	4	1	1	1	1
13	Total Plant in Service	TOT PLT	22,019,631	5,627,558	13,281,111	72,156	3,038,806
14	Office Expenses	OFFICE	143,445	42,942	49,262	40,044	11,197
15	Operating Plant Excluding Land	OP PLT X LAND	21,973,301	5,601,396	13,281,111	72,156	3,018,638
16	Depreciation Expense	DEPR. EXP	338,950	159,350	73,831	6,317	99,452
17	Materials and Supplies Expense	M&S	15,236	2,964	7,154	3,491	1,626
18	Total O&M	TOT OM	1,172,253	275,531	571,298	195,574	129,849
19	Net Plant Excluding CIAC	NET PLT X CIAC	9,816,084	3,215,674	5,860,069	22,810	717,531
20	Net Plant	NET PLT	4,503,888	3,215,674	547,873	22,810	717,531
21	Rate Base	RB	4,395,397	3,181,590	456,977	60,253	696,577
22	<b>Relative Factors</b>						
23	Volume Direct	VOLUME	100%	100%	0%	0%	0%
24	Max Day Direct	MAX DAY	100%	0%	100%	0%	0%
25	Customer Direct	CUST	100%	0%	0%	100%	0%
26	Effluent	EFFLUENT	100%	0%	0%	0%	100%
27	Gross Plant Excluding Customer	PLT XCUST	0%	0%	0%	0%	0%
28	Administrative Payroll	ADMIN PAY	100%	19%	47%	23%	11%
29	Interest Expense	INT	0%	0%	0%	0%	0%
30	Operating Plant	O&M PLT	100%	25%	61%	0%	14%
31	Operating Plant Excluding Effluent	OMPLT X EFF	100%	29%	71%	0%	0%
32	PRM&S	PRM&S	100%	24%	48%	17%	11%
33	Test Function	Test	100%	25%	25%	25%	25%
34	Total Plant in Service	TOT PLT	100%	26%	60%	0%	14%
35	Office Expenses	OFFICE	100%	30%	34%	28%	8%
36	Operating Plant Excluding Land	OP PLT X LAND	100%	25%	60%	0%	14%
37	Depreciation Expense	DEPR. EXP	100%	47%	22%	2%	29%
38	Materials and Supplies Expense	M&S	100%	19%	47%	23%	11%
39	Total O&M	TOT OM	100%	24%	49%	17%	11%
40	Net Plant Excluding CIAC	NET PLT X CIAC	100%	33%	60%	0%	7%
41	Net Plant	NET PLT	100%	71%	12%	1%	16%
42	Rate Base	RB	100%	72%	10%	1%	16%

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Allocation Factor Development Workpaper

Line No.	Description	Factor Code	Total	Residential	Commercial	Hotel	Effluent
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	<b>Absolute Factors</b>						
2	Total Usage	Usage	382,927	335,853	35,553	11,521	
3	Max Day Demand	Max Day	2,485	2,141	272	72	
4	Customer Count	Customers	44,736	42,180	2,508	12	36
5	Effluent Direct	Effluent	1				1
6	Test Allocation	Test	4	1	1	1	1
7	Base Usage	Base Usage	321,892	278,868	34,124	8,900	
8	[Placeholder]	RD Usage	388,465	351,605	28,043	8,817	
9	[Placeholder]						
10	[Placeholder]						
11	[Placeholder]						
12	[Placeholder]						
13	[Placeholder]						
14	[Placeholder]						
15	[Placeholder]						
16	[Placeholder]						
17	<b>Relative Factors</b>						
18	Total Usage	Usage	100%	88%	9%	3%	0%
19	Max Day Demand	Max Day	100%	86%	11%	3%	0%
20	Customer Count	Customers	100%	94%	6%	0%	0%
21	Effluent Direct	Effluent	100%	0%	0%	0%	100%
22	Test Allocation	Test	100%	25%	25%	25%	25%
23	Base Usage	Base Usage	100%	87%	11%	3%	0%
24	[Placeholder]	RD Usage	100%	91%	7%	2%	0%
25	[Placeholder]	0	0%	0%	0%	0%	0%
26	[Placeholder]	0	0%	0%	0%	0%	0%
27	[Placeholder]	0	0%	0%	0%	0%	0%
28	[Placeholder]	0	0%	0%	0%	0%	0%
29	[Placeholder]	0	0%	0%	0%	0%	0%
30	[Placeholder]	0	0%	0%	0%	0%	0%
31	[Placeholder]	0	0%	0%	0%	0%	0%
32	[Placeholder]	0	0%	0%	0%	0%	0%

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Rate Base Functionalization Workpaper

Line No.	Acct	Description	per Books	K&M Adjustments	As Adjusted	Funct. Factor	Volume	Max Day	Customer	Effluent
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1		Plant in Service	\$ 22,354,636	\$ (335,004)	\$ 22,019,631		\$ 5,627,558	\$ 13,281,111	\$ 72,156	\$ 3,038,806
2		Accumulated Depreciation	(11,649,173)	(554,375)	(12,203,548)		(2,411,884)	(7,421,042)	(49,346)	(2,321,275)
3		CIAC (Net)	(5,567,447)	255,251	(5,312,196)		-	(5,312,196)	-	-
4		<b>Net Plant</b>	<b>5,138,015</b>	<b>(634,127)</b>	<b>4,503,888</b>		<b>3,215,674</b>	<b>547,873</b>	<b>22,810</b>	<b>717,531</b>
5		Accumulated Deferred Income Taxes (System Allocation on DFIT/DSIT Balances)	(191,161)	-	(191,161)	TOT PLT	(48,855)	(115,298)	(626)	(26,381)
6		Excess Deferred Income Taxes	(129,604)	-	(129,604)	TOT PLT	(33,123)	(78,170)	(425)	(17,886)
7		Materials and Supplies (System Allocation on M&S Expense)	49,414	-	49,414	M&S	9,614	23,203	11,323	5,274
8		Prepayments (System Allocation on System O&M Expense)	17,704	-	17,704	TOT OM	4,161	8,628	2,954	1,961
9		Cash Working Capital (System Allocation on System O&M Expense)	159,480	(14,324)	145,156	TOT OM	34,118	70,742	24,217	16,079
10		<b>Total Rate Base</b>	<b>5,043,848</b>	<b>(648,452)</b>	<b>4,395,397</b>		<b>3,181,590</b>	<b>456,977</b>	<b>60,253</b>	<b>696,577</b>

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Plant Functionalization Workpaper

Line No.	Acct	Description	per Books	K&M Adjustments	As Adjusted	Funct. Factor	Volume	Max Day	Customer	Effluent
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Plant Original Cost										
1	353.6	Reclaimed Plt. - Land and Land Rights	\$ 1,800,000	\$ -	\$ 1,800,000	VOLUME	\$ 1,800,000	\$ -	\$ -	\$ -
2	353.6	Reclaimed Plt. - Land and Land Rights - Effl.	-	-	-	EFFLUENT	-	-	-	-
3	354.4	Treatment and Distr. - Structures and Improvements	3,203,922	(42,042)	3,161,880	VOLUME	3,161,880	-	-	-
4	354.4	Treatment and Distr. - Structures and Improvements Efful.	90,986	-	90,986	EFFLUENT	-	-	-	90,986
5	354.7	General Plant - Structures and Improvements	84,081	-	84,081	OFFICE	25,171	28,875	23,472	6,563
6	360.2	Collection - Collection Sewers - Force	11,507,271	(6,491)	11,500,780	Max Day	-	11,500,780	-	-
7	360.2	Collection - Collection Sewers - Force Efful.	6,491	-	6,491	EFFLUENT	-	-	-	6,491
8	361.2	Collection - Collection Sewers - Gravity	1,971,168	(468,997)	1,502,172	Max Day	-	1,502,172	-	-
9	361.2	Collection - Collection Sewers - Gravity Efful.	2,751,702	-	2,751,702	EFFLUENT	-	-	-	2,751,702
10	371.3	Pumping - Pumping Equipment	181,431	91,591	273,021	VOLUME	273,021	-	-	-
11	371.3	Pumping - Pumping Equipment Efful.	106,237	-	106,237	EFFLUENT	-	-	-	106,237
12	380.4	Treatment and Distr. - Treatment and Disposal Equipment	29,511	110,343	139,853	VOLUME	139,853	-	-	-
13	380.4	Treatment and Distr. - Treatment and Disposal Equipment Efful.	20,168	-	20,168	EFFLUENT	-	-	-	20,168
14	389.3	Pumping - Other and Misc. Equipment	26,163	-	26,163	VOLUME	26,163	-	-	-
15	389.4	Treatment and Distr. - Other and Misc. Equipment	70,978	-	70,978	VOLUME	70,978	-	-	-
16	390.7	General Plant - Office Furniture and Equip.	181,845	(14,611)	167,234	OFFICE	50,064	57,432	46,685	13,054
17	391.7	General Plant - Transportation Equip.	301,451	-	301,451	O&M PLT	76,005	183,425	330	41,690
18	393.7	General Plant - Tools, Shop and Garage Equip.	10,497	-	10,497	O&M PLT	2,647	6,387	12	1,452
19	396.7	General Plant - Communications Equip	1,139	-	1,139	OFFICE	341	391	318	89
20	397.7	General Plant - Misc. Equip.	9,596	(4,798)	4,798	OFFICE	1,436	1,648	1,339	375
21	Total Plant Original Cost		\$ 22,354,636	\$ (335,004)	\$ 22,019,631		\$ 5,627,558	\$ 13,281,111	\$ 72,156	\$ 3,038,806
22	360.2	Collection - Collection Sewers - Force CIAC	(11,507,271)		(11,507,271)	Max Day	-	(11,507,271)	-	-
23	Total Plant Original Cost including CIAC		\$ 10,847,365	\$ (335,004)	\$ 10,512,360		\$ 5,627,558	\$ 1,773,840	\$ 72,156	\$ 3,038,806
22	Subtotal: Operating Plant		21,732,799	(315,596)	21,417,203		5,399,925	13,031,828	23,472	2,961,979
24	Subtotal: Operating Plant Excl. Land		22,308,305	(315,596)	21,973,301		5,601,396	13,281,111	72,156	3,018,638
Accumulated Depreciation										
25	353.6	Reclaimed Plt. - Land and Land Rights	\$ -	\$ -	-	VOLUME	\$ -	\$ -	\$ -	-
26	353.6	Reclaimed Plt. - Land and Land Rights - Effl.	-	-	-	EFFLUENT	-	-	-	-
27	354.4	Treatment and Distr. - Structures and Improvements	(2,050,963)	(93,340)	(2,144,303)	VOLUME	(2,144,303)	-	-	-
28	354.4	Treatment and Distr. - Structures and Improvements Efful.	(84,812)	(2,651)	(87,462)	EFFLUENT	-	-	-	(87,462)
29	354.7	General Plant - Structures and Improvements	(5,234)	-	(5,234)	OFFICE	(1,567)	(1,797)	(1,461)	(409)
30	360.2	Collection - Collection Sewers - Force	(5,939,824)	(255,540)	(6,195,364)	Max Day	-	(6,195,364)	-	-
31	360.2	Collection - Collection Sewers - Force Efful.	(144)	(144)	(288)	EFFLUENT	-	-	-	(288)
32	361.2	Collection - Collection Sewers - Gravity	(1,010,057)	(36,340)	(1,046,396)	Max Day	-	(1,046,396)	-	-
33	361.2	Collection - Collection Sewers - Gravity Efful.	(2,089,801)	(66,567)	(2,156,368)	EFFLUENT	-	-	-	(2,156,368)
34	371.3	Pumping - Pumping Equipment	(74,588)	(20,357)	(94,946)	VOLUME	(94,946)	-	-	-
35	371.3	Pumping - Pumping Equipment Efful.	(24,488)	(11,920)	(36,408)	EFFLUENT	-	-	-	(36,408)
36	380.4	Treatment and Distr. - Treatment and Disposal Equipment	-	(7,036)	(7,036)	VOLUME	(7,036)	-	-	-
37	380.4	Treatment and Distr. - Treatment and Disposal Equipment Efful.	-	-	-	EFFLUENT	-	-	-	-
38	389.3	Pumping - Other and Misc. Equipment	(6,105)	(2,616)	(8,721)	VOLUME	(8,721)	-	-	-
39	389.4	Treatment and Distr. - Other and Misc. Equipment	(52,607)	(2,342)	(54,949)	VOLUME	(54,949)	-	-	-
40	390.7	General Plant - Office Furniture and Equip.	(150,421)	(19,123)	(169,544)	OFFICE	(50,755)	(58,225)	(47,330)	(13,234)
41	391.7	General Plant - Transportation Equip.	(159,188)	(34,991)	(194,179)	O&M PLT	(48,959)	(118,153)	(213)	(26,855)
42	393.7	General Plant - Tools, Shop and Garage Equip.	(428)	(700)	(1,128)	O&M PLT	(284)	(686)	(1)	(156)
43	396.7	General Plant - Communications Equip	(171)	(228)	(399)	OFFICE	(119)	(137)	(111)	(31)
44	397.7	General Plant - Misc. Equip.	(343)	(480)	(823)	OFFICE	(246)	(283)	(230)	(64)
45	Total Accumulated Depreciation		\$ (11,649,173)	\$ (554,375)	\$ (12,203,548)		\$ (2,411,884)	\$ (7,421,042)	\$ (49,346)	\$ (2,321,275)
46	360.2	Amortization Collection - Collection Sewers - Force CIAC	5,939,824	255,251	6,195,075	Max Day	-	6,195,075	-	-
47	Total Accumulated Depreciation and Amortization		\$ (5,709,349)	\$ (299,123)	\$ (6,008,473)		\$ (2,411,884)	\$ (1,225,967)	\$ (49,346)	\$ (2,321,275)
46	Subtotal: Operating Plant		(11,279,911)	(493,894)	(11,773,805)		(2,247,851)	(7,243,558)	(1,461)	(2,280,935)
48	Subtotal: Operating Plant Excl. Land		(11,643,069)	(496,510)	(12,194,827)		(2,403,164)	(7,421,042)	(49,346)	(2,321,275)
Net Plant										
49	353.6	Reclaimed Plt. - Land and Land Rights	\$ 1,800,000	\$ -	\$ 1,800,000	VOLUME	\$ 1,800,000	\$ -	\$ -	-
50	353.6	Reclaimed Plt. - Land and Land Rights - Effl.	-	-	-	EFFLUENT	-	-	-	-
51	354.4	Treatment and Distr. - Structures and Improvements	1,152,958	(135,381)	1,017,577	VOLUME	1,017,577	-	-	-



KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Plant Functionalization Workpaper

Line No.	Acct	Description	per Books	K&M Adjustments	As Adjusted	Funct. Factor	Volume	Max Day	Customer	Effluent
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
52	354.4	Treatment and Distr. - Structures and Improvements Efful.	6,174	(2,651)	3,524	EFFLUENT	-	-	-	3,524
53	354.7	General Plant - Structures and Improvements	78,847	-	78,847	OFFICE	23,604	27,078	22,011	6,154
54	360.2	Collection - Collection Sewers - Force	5,567,447	(262,031)	5,305,417	Max Day	-	5,305,417	-	-
55	360.2	Collection - Collection Sewers - Force Efful.	6,346	(144)	6,202	EFFLUENT	-	-	-	6,202
56	361.2	Collection - Collection Sewers - Gravity	961,112	(505,336)	455,775	Max Day	-	455,775	-	-
57	361.2	Collection - Collection Sewers - Gravity Efful.	661,902	(66,567)	595,334	EFFLUENT	-	-	-	595,334
58	371.3	Pumping - Pumping Equipment	106,842	71,234	178,076	VOLUME	178,076	-	-	-
59	371.3	Pumping - Pumping Equipment Efful.	81,749	(11,920)	69,829	EFFLUENT	-	-	-	69,829
60	380.4	Treatment and Distr. - Treatment and Disposal Equipment	29,511	103,307	132,817	VOLUME	132,817	-	-	-
61	380.4	Treatment and Distr. - Treatment and Disposal Equipment Efful.	20,168	-	20,168	EFFLUENT	-	-	-	20,168
62	389.3	Pumping - Other and Misc. Equipment	20,058	(2,616)	17,442	VOLUME	17,442	-	-	-
63	389.4	Treatment and Distr. - Other and Misc. Equipment	18,371	(2,342)	16,029	VOLUME	16,029	-	-	-
64	390.7	General Plant - Office Furniture and Equip.	31,424	(33,734)	(2,310)	OFFICE	(692)	(793)	(645)	(180)
65	391.7	General Plant - Transportation Equip.	142,263	(34,991)	107,272	O&M PLT	27,046	65,272	118	14,836
66	393.7	General Plant - Tools, Shop and Garage Equip.	10,069	(700)	9,369	O&M PLT	2,362	5,701	10	1,296
67	396.7	General Plant - Communications Equip	969	(228)	741	OFFICE	222	254	207	58
68	397.7	General Plant - Misc. Equip.	9,252	(5,278)	3,975	OFFICE	1,190	1,365	1,110	310
69		<b>Total Net Plant</b>	<b>\$ 10,705,463</b>	<b>\$ (889,379)</b>	<b>\$ 9,816,084</b>		<b>\$ 3,215,674</b>	<b>\$ 5,860,069</b>	<b>\$ 22,810</b>	<b>\$ 717,531</b>
70	360.2	Amortization Collection - Collection Sewers - Force	(5,567,447)	255,251	(5,312,196)	Max Day	-	(5,312,196)	-	-
71		<b>Total Accumulated Depreciation and Amortization</b>	<b>\$ 5,138,015</b>	<b>\$ (634,127)</b>	<b>\$ 4,503,888</b>		<b>\$ 3,215,674</b>	<b>\$ 547,873</b>	<b>\$ 22,810</b>	<b>\$ 717,531</b>
70		Subtotal: Operating Plant	10,452,888	(809,490)	9,643,398		3,152,074	5,788,270	22,011	681,044
72		Subtotal: Operating Plant Excl. Land	10,665,237	(812,106)	9,778,474		3,198,232	5,860,069	22,810	697,363

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Depreciation Expense Functionalization Workpaper

Line No.	Acct	Description	per Books	K&M Adjustments	As Adjusted	Funct. Factor	Volume	Max Day	Customer	Effluent
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1	353.6	Reclaimed Plt. - Land and Land Rights	-	-	-	VOLUME	-	-	-	-
2	353.6	Reclaimed Plt. - Land and Land Rights - Effl.	-	-	-	EFFLUENT	-	-	-	-
3	354.4	Treatment and Distr. - Structures and Improvements	97,984	(4,645)	93,340	VOLUME	93,340	-	-	-
4	354.4	Treatment and Distr. - Structures and Improvements Effl.	2,783	(132)	2,651	EFFLUENT	-	-	-	2,651
5	354.7	General Plant - Structures and Improvements	-	-	-	OFFICE	-	-	-	-
6	360.2	Collection - Collection Sewers - Force	255,252	288	255,540	Max Day	-	255,540	-	-
7	360.2	Collection - Collection Sewers - Force Effl.	144	0	144	EFFLUENT	-	-	-	144
8	360.2	Collection - Collection Sewers - Force CIAC	(255,251)	-	(255,251)	Max Day	-	(255,251)	-	-
9	360.2	Collection - Collection Sewers - Force CIAC Effl.	-	-	-	EFFLUENT	-	-	-	-
10	361.2	Collection - Collection Sewers - Gravity	44,119	(7,779)	36,340	Max Day	-	36,340	-	-
11	361.2	Collection - Collection Sewers - Gravity Effl.	61,588	-	66,567	EFFLUENT	-	-	-	66,567
12	371.3	Pumping - Pumping Equipment	9,005	11,352	20,357	VOLUME	20,357	-	-	-
13	371.3	Pumping - Pumping Equipment Effl.	5,273	6,647	11,920	EFFLUENT	-	-	-	11,920
14	380.4	Treatment and Distr. - Treatment and Disposal Equipment	2,080	4,956	7,036	VOLUME	7,036	-	-	-
15	380.4	Treatment and Distr. - Treatment and Disposal Equipment Effl.	-	-	-	EFFLUENT	-	-	-	-
16	389.3	Pumping - Other and Misc. Equipment	2,616	-	2,616	VOLUME	2,616	-	-	-
17	389.4	Treatment and Distr. - Other and Misc. Equipment	2,415	(73)	2,342	VOLUME	2,342	-	-	-
18	390.7	General Plant - Office Furniture and Equip.	16,201	2,922	19,123	OFFICE	5,725	6,567	5,338	1,493
19	391.7	General Plant - Transportation Equip.	26,658	8,333	34,991	O&M PLT	8,822	21,291	38	4,839
20	393.7	General Plant - Tools, Shop and Garage Equip.	428	272	700	O&M PLT	177	426	1	97
21	396.7	General Plant - Communications Equip	171	57	228	OFFICE	68	78	64	18
22	397.7	General Plant - Misc. Equip.	172	308	480	OFFICE	144	165	134	37
23		<b>Total Depreciation Expense</b>	<b>271,638</b>	<b>22,507</b>	<b>299,124</b>		<b>140,626</b>	<b>65,156</b>	<b>5,575</b>	<b>87,766</b>
24		Allocated Overhead	-	-	39,827	DEPR EXP	18,724	8,675	742	11,686
25		Depreciation Expense Including Overhead	<b>271,638</b>	<b>22,507</b>	<b>338,950</b>		<b>159,350</b>	<b>73,831</b>	<b>6,317</b>	<b>99,452</b>

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Account 390.7 Functionalization Workpaper

Line No.	Acct	Description	per Books	K&M Adjustments	As Adjusted	Funct. Factor	Volume	Max Day	Customer	Effluent
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1	390.7	AS/400 Billing System	6,059	-	6,059	Cust	-	-	6,059	-
2	390.7	AS/400 Desk Top Scanner	575	-	575	Cust	-	-	575	-
3	390.7	AS/400 Upgrade	6,160	-	6,160	Cust	-	-	6,160	-
4	390.7	As400 Conversion	5,198	-	5,198	Cust	-	-	5,198	-
5	390.7	Billing Printer	607	-	607	Cust	-	-	607	-
6	390.7	Dell Computer - Billing	659	-	659	Cust	-	-	659	-
7	390.7	Nortel Phone System	4,645	-	4,645	Cust	-	-	4,645	-
8	390.7	Safe	111	-	111	Cust	-	-	111	-
9	390.7	GIS System	48,394	-	48,394	O&M PLT	12,202	29,447	53	6,693
10	390.7	Security Monitor	265	-	265	O&M PLT	67	161	0	37
11	390.7	Lab equipment	13,541	-	13,541	Volume	13,541	-	-	-
12	390.7	2 Tables & 8 Folding Chairs	127	-	127	Gen Off Direct	38	44	35	10
13	390.7	3 File Cabinets	638	-	638	Gen Off Direct	191	219	178	50
14	390.7	6 Remotes	80	-	80	Gen Off Direct	24	27	22	6
15	390.7	Accounting Computer	532	-	532	Gen Off Direct	159	183	148	42
16	390.7	Antenna Tower	1,335	-	1,335	Gen Off Direct	400	458	373	104
17	390.7	Antero Data Port	1,215	-	1,215	Gen Off Direct	364	417	339	95
18	390.7	Appliances	1,116	-	1,116	Gen Off Direct	334	383	312	87
19	390.7	Dell Computer	921	-	921	Gen Off Direct	276	316	257	72
20	390.7	Dell Computer - Randy	434	-	434	Gen Off Direct	130	149	121	34
21	390.7	Dell Computers & Monitors	1,232	-	1,232	Gen Off Direct	369	423	344	96
22	390.7	Dell Laptop - Becky	933	-	933	Gen Off Direct	279	320	260	73
23	390.7	File Cabinet	276	-	276	Gen Off Direct	83	95	77	22
24	390.7	Fixtures	5,053	-	5,053	Gen Off Direct	1,513	1,735	1,411	394
25	390.7	Furniture	2,252	-	2,252	Gen Off Direct	674	774	629	176
26	390.7	HP 4050N laser printer	898	-	898	Gen Off Direct	269	308	251	70
27	390.7	IBM 133mhz pentium / Dock Station	3,222	-	3,222	Gen Off Direct	965	1,107	900	252
28	390.7	IBM 90mhz pentium /Dock Station Monitor	3,296	-	3,296	Gen Off Direct	987	1,132	920	257
29	390.7	IBM Server	14,021	-	14,021	Gen Off Direct	4,197	4,815	3,914	1,094
30	390.7	Mats	156	-	156	Gen Off Direct	47	54	44	12
31	390.7	Office Network Equipment	17,257	-	17,257	Gen Off Direct	5,166	5,926	4,817	1,347
32	390.7	Software/maint. USTI	2,237	-	2,237	Gen Off Direct	670	768	624	175
33		<b>Total 390.7</b>	<b>\$ 143,445</b>	<b>\$ -</b>	<b>\$ 143,445</b>		<b>\$ 42,942</b>	<b>\$ 49,262</b>	<b>\$ 40,044</b>	<b>\$ 11,197</b>
34		Directly Functionalized	86,214	-	86,214		25,809	29,608	24,068	6,730

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer 3-Year Average Usage Workpaper

Line No.	Description	Total	Residential	Commercial	Hotel	Effluent	Days
(a)	(b)	(c)	(d)	(e)	(f)	(g)	
1	<b>3-Year Average Usage by Month</b>						
2	January	32,006	20,368	1,980	697	8,961	31
3	February	29,426	16,061	1,747	953	10,665	28
4	March	40,031	18,367	2,048	685	18,931	31
5	April	46,191	26,428	2,360	843	16,559	30
6	May	55,814	31,012	2,865	900	21,038	31
7	June	58,974	32,394	3,108	857	22,615	30
8	July	68,568	38,298	4,874	1,283	24,113	31
9	August	61,483	36,016	4,602	1,224	19,641	31
10	September	51,839	32,774	3,721	1,074	14,270	30
11	October	50,130	31,033	3,107	948	15,042	31
12	November	45,265	28,912	2,940	1,100	12,313	30
13	December	40,032	24,191	2,202	957	12,682	31
14	<b>Annual Total</b>	<b>579,759</b>	<b>335,853</b>	<b>35,553</b>	<b>11,521</b>	<b>196,831</b>	<b>365</b>
15	NCP Peak	68,568	38,298	4,874	1,283	24,113	
16	CP Peak	68,568	38,298	4,874	1,283	24,113	
17	Avg. Day	1,587	920	97	32	539	
18	Avg. Max Month	2,212	1,235	157	41	778	
19	Max Month / Avg. Day Factor	1.39	1.34	1.62	1.31	1.44	
20	System Max Day Factor	1.73	1.73	1.73	1.73	1.73	
21	Weekly Usage Adjustment		1.0	1.0	1.0	1.0	
22	Max Day Factor		233%	280%	227%	250%	
23	Max Day Volumes	3,833	2,141	272	72	1,348	

**KIAWAH ISLAND UTILITY, INC.**  
**Test Year Ending December 31, 2020**  
Sewer Base Usage Workpaper

Docket No. 2021-324-WS  
Direct Testimony of Charles Loy  
Exhibit 2 - Sewer COSS Schedules  
Page 12 of 14

Line No.	Description	January	February	March	April	May	June	July	August	September	October	November	December
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	<b>Residential Water Usage</b>												
2	Up to 11k Gallons	21,213	16,662	18,484	27,598	32,806	33,230	41,015	38,342	34,941	33,121	30,430	25,277
3	11k-50k Gallons	4,946	3,333	4,041	7,529	11,595	12,704	17,950	15,472	13,666	13,506	10,017	6,617
4	Over 50k Gallons	532	129	377	739	872	999	2,395	1,683	1,395	1,691	1,003	613
5	<b>Total Residential Water Usage</b>	<b>26,691</b>	<b>20,124</b>	<b>22,901</b>	<b>35,867</b>	<b>45,273</b>	<b>46,932</b>	<b>61,360</b>	<b>55,498</b>	<b>50,002</b>	<b>48,318</b>	<b>41,450</b>	<b>32,507</b>
6	<b>Residential Customers</b>	<b>3,515</b>	<b>3,515</b>	<b>3,515</b>	<b>3,515</b>	<b>3,515</b>	<b>3,515</b>	<b>3,515</b>	<b>3,515</b>	<b>3,515</b>	<b>3,515</b>	<b>3,515</b>	<b>3,515</b>
7	<b>Avg. Usage per Res. Customer</b>	<b>7.59</b>	<b>5.73</b>	<b>6.52</b>	<b>10.20</b>	<b>12.88</b>	<b>13.35</b>	<b>17.46</b>	<b>15.79</b>	<b>14.23</b>	<b>13.75</b>	<b>11.79</b>	<b>9.25</b>
8	Base Usage Months	X	X	X									
9	Base Usage Avg.	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61
10	<b>Sewer Residential Allocation Usage</b>	<b>23,239</b>	<b>23,239</b>	<b>23,239</b>	<b>23,239</b>	<b>23,239</b>	<b>23,239</b>	<b>23,239</b>	<b>23,239</b>	<b>23,239</b>	<b>23,239</b>	<b>23,239</b>	<b>23,239</b>
11	<b>Commercial Water Usage</b>												
12	Total Gallons x 1,000	2,894	2,592	3,045	3,802	4,871	5,408	7,836	7,300	6,816	6,722	4,822	3,288
13	Customers	209	209	209	209	209	209	209	209	209	209	209	209
14	<b>Avg. Usage per Comm. Customer</b>	<b>13.85</b>	<b>12.40</b>	<b>14.57</b>	<b>18.19</b>	<b>23.31</b>	<b>25.88</b>	<b>37.49</b>	<b>34.93</b>	<b>32.61</b>	<b>32.16</b>	<b>23.07</b>	<b>15.73</b>
15	Base Usage Months	X	X	X									
16	Base Usage Avg.	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61
17	<b>Sewer Commercial Allocation Usage</b>	<b>2,844</b>	<b>2,844</b>	<b>2,844</b>	<b>2,844</b>	<b>2,844</b>	<b>2,844</b>	<b>2,844</b>	<b>2,844</b>	<b>2,844</b>	<b>2,844</b>	<b>2,844</b>	<b>2,844</b>
18	<b>Hotel Water Usage</b>												
19	Total Gallons x 1,000	697	953	685	843	900	857	1,283	1,224	1,074	948	1,100	957
20	Customers	12	12	12	12	12	12	12	12	12	12	12	12
21	<b>Avg. Usage per Hotel Customer</b>	<b>58.08</b>	<b>79.39</b>	<b>57.06</b>	<b>70.28</b>	<b>75.00</b>	<b>71.44</b>	<b>106.89</b>	<b>102.03</b>	<b>89.50</b>	<b>79.00</b>	<b>91.67</b>	<b>79.78</b>
22	Base Usage Months	X		X	X								
23	Base Usage Avg.	61.81	61.81	61.81	61.81	61.81	61.81	61.81	61.81	61.81	61.81	61.81	61.81
24	<b>Sewer Commercial Allocation Usage</b>	<b>742</b>	<b>742</b>	<b>742</b>	<b>742</b>	<b>742</b>	<b>742</b>	<b>742</b>	<b>742</b>	<b>742</b>	<b>742</b>	<b>742</b>	<b>742</b>

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer 3-Year Average Flow by Day Workpaper

Line No.	Day	January	February	March	April	May	June	July	August	September	October	November	December
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	Day 01	0.640	0.376	0.378	0.574	0.443	0.613	0.712	0.675	0.558	0.443	0.445	0.542
2	Day 02	0.548	0.372	0.394	0.621	0.431	0.580	0.782	0.748	0.547	0.433	0.463	0.557
3	Day 03	0.568	0.367	0.413	0.544	0.444	0.545	0.811	0.756	0.462	0.466	0.452	0.478
4	Day 04	0.460	0.354	0.450	0.544	0.468	0.557	0.874	0.700	0.468	0.507	0.466	0.446
5	Day 05	0.425	0.337	0.523	0.545	0.478	0.544	0.888	0.684	0.505	0.491	0.504	0.435
6	Day 06	0.386	0.363	0.452	0.559	0.451	0.589	0.781	0.655	0.495	0.498	0.454	0.440
7	Day 07	0.392	0.383	0.425	0.549	0.428	0.609	0.907	0.668	0.561	0.499	0.468	0.439
8	Day 08	0.370	0.365	0.451	0.475	0.403	0.609	0.765	0.633	0.545	0.504	0.486	0.514
9	Day 09	0.370	0.414	0.458	0.458	0.411	0.617	0.689	0.640	0.516	0.509	0.560	0.471
10	Day 10	0.357	0.380	0.472	0.456	0.458	0.589	0.678	0.608	0.462	0.543	0.527	0.407
11	Day 11	0.356	0.348	0.472	0.439	0.431	0.591	0.659	0.608	0.423	0.542	0.481	0.405
12	Day 12	0.379	0.354	0.488	0.457	0.449	0.727	0.750	0.602	0.405	0.538	0.507	0.403
13	Day 13	0.378	0.353	0.465	0.536	0.424	0.646	0.706	0.588	0.434	0.513	0.518	0.480
14	Day 14	0.373	0.368	0.462	0.508	0.410	0.687	0.653	0.633	0.374	0.518	0.497	0.690
15	Day 15	0.351	0.409	0.488	0.532	0.427	0.784	0.649	0.627	0.391	0.408	0.546	0.644
16	Day 16	0.356	0.422	0.486	0.505	0.442	0.746	0.604	0.653	0.386	0.554	0.515	0.488
17	Day 17	0.377	0.423	0.491	0.507	0.478	0.669	0.670	0.636	0.393	0.483	0.511	0.451
18	Day 18	0.403	0.416	0.479	0.499	0.501	0.613	0.608	0.603	0.409	0.532	0.515	0.422
19	Day 19	0.379	0.392	0.467	0.559	0.507	0.649	0.620	0.562	0.407	0.528	0.486	0.422
20	Day 20	0.407	0.407	0.501	0.579	0.516	0.671	0.676	0.560	0.451	0.527	0.498	0.485
21	Day 21	0.366	0.393	0.476	0.558	0.508	0.718	0.656	0.575	0.439	0.499	0.518	0.464
22	Day 22	0.353	0.385	0.519	0.505	0.497	0.668	0.610	0.540	0.445	0.471	0.584	0.484
23	Day 23	0.360	0.395	0.492	0.696	0.531	0.661	0.646	0.557	0.432	0.492	0.581	0.657
24	Day 24	0.362	0.406	0.484	0.644	0.548	0.717	0.664	0.548	0.420	0.453	0.604	0.788
25	Day 25	0.361	0.393	0.501	0.524	0.649	0.733	0.625	0.540	0.448	0.462	0.531	0.591
26	Day 26	0.352	0.386	0.512	0.509	0.694	0.684	0.682	0.493	0.431	0.481	0.510	0.600
27	Day 27	0.351	0.379	0.522	0.497	0.902	0.677	0.663	0.453	0.470	0.481	0.548	0.601
28	Day 28	0.334	0.394	0.527	0.493	0.769	0.711	0.636	0.496	0.552	0.447	0.574	0.664
29	Day 29	0.337	0.437	0.530	0.460	0.672	0.719	0.636	0.471	0.580	0.446	0.607	0.753
30	Day 30	0.341	-	0.550	0.501	0.603	0.699	0.641	0.490	0.492	0.442	0.579	0.732
31	Day 31	0.352	-	0.562	-	0.596	-	0.768	0.530	-	0.438	-	0.746
32	Month Total	12.144	11.172	14.890	15.832	15.970	19.623	21.709	18.531	13.902	15.146	15.536	16.699
33	Maximum Day	0.640	0.437	0.562	0.696	0.902	0.784	0.907	0.756	0.580	0.554	0.607	0.788
34	Minimum Day	0.334	0.337	0.378	0.439	0.403	0.544	0.604	0.453	0.374	0.408	0.445	0.403
35	Avg. Day	0.392	0.385	0.480	0.528	0.515	0.654	0.700	0.598	0.463	0.489	0.518	0.539

KIAWAH ISLAND UTILITY, INC.  
Test Year Ending December 31, 2020  
Sewer Proposed Rate Design

Line No.	Description	Annualized Value	Current Rate	Current Revenues	Proposed Rates	Proposed Revenues	Incr./ (Decr.) Absolute	Incr./ (Decr.) Relative
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	<b>Residential</b>							
2	5/8" Meter	34,620	\$ 28.00	\$ 969,360	\$ 30.72	\$ 1,063,649	94,289	9.73%
3	3/4 Meter	5,196	42.00	218,232	46.09	239,459	21,227	9.73%
4	1" Meter	3,876	69.99	271,281	76.80	297,669	26,387	9.73%
5	1 1/2" Meter	120	139.98	16,798	153.60	18,431	1,634	9.73%
6	2" Meter	84	223.98	18,814	245.77	20,644	1,830	9.73%
7	3" Meter	-	489.95	-	537.61	-	-	0.00%
8	4" Meter	-	1,514.79	-	1,662.13	-	-	0.00%
9	Consumption to 11,000 gals/mo.	351,605	0.74	260,188	0.81	285,496	25,308	9.73%
10	Consumption 11,000-50,000 gals/mo.	-	-	-	-	-	-	0.00%
11	Consumption over 50,000 gals/mo	-	-	-	-	-	-	0.00%
12	<b>Total Residential Customers</b>			<b>1,754,673</b>		<b>1,925,349</b>	<b>170,676</b>	<b>9.73%</b>
13	<b>Target Revenues</b>					<b>1,925,349</b>		
14	<b>Difference</b>					-		
15	<b>Commercial</b>							
16	5/8" Meter	276	28.00	7,728	30.40	8,390	662	8.57%
17	3/4 Meter	120	42.00	5,040	45.60	5,472	432	8.57%
18	1" Meter	84	69.99	5,879	75.99	6,383	504	8.57%
19	1 1/2" Meter	156	139.98	21,837	151.98	23,708	1,871	8.57%
20	2" Meter	180	223.98	40,316	243.18	43,772	3,455	8.57%
21	3" Meter	48	489.95	23,518	531.94	25,533	2,015	8.57%
22	4" Meter	24	1,514.79	36,355	1,644.61	39,471	3,116	8.57%
23	Consumption	28,043	2.86	80,203	3.11	87,076	6,873	8.57%
24	<b>Total Commercial Customers</b>			<b>220,876</b>		<b>239,805</b>	<b>18,929</b>	<b>8.57%</b>
25	<b>Target Revenues</b>					<b>239,805</b>		
26	<b>Difference</b>					-		
27	<b>Hotels</b>							
28	per Room	3,060	11.19	34,241	12.15	37,176	2,934	8.57%
29	Consumption	8,817	2.86	25,217	3.11	27,378	2,161	8.57%
30	<b>Total Hotels</b>			<b>59,458</b>		<b>64,554</b>	<b>5,096</b>	<b>8.57%</b>
31	<b>Target Revenues</b>					<b>64,554</b>		
32	<b>Difference</b>					-		
33	<b>Effluent</b>							
34	Effluent Water	36	4,648.72	167,354	5,968.96	214,882	47,529	28.40%
35	Consumption	211,679	0.20	42,336	0.26	54,359	12,023	28.40%
36	<b>Total Golf - Potable</b>			<b>209,690</b>		<b>269,242</b>	<b>59,552</b>	<b>28.40%</b>
37	<b>Target Revenues</b>					<b>269,242</b>		
38	<b>Difference</b>					-		
39	<b>TOTAL RATE REVENUES</b>			<b>2,244,697</b>		<b>2,498,949</b>	<b>254,253</b>	<b>10.17%</b>
40	<b>TOTAL REVENUE TARGET</b>					<b>2,498,949</b>		
41	<b>DIFFERENCE</b>					-		

<b>5/8" Residential Customer</b>	<b>Current</b>	<b>Proposed</b>	<b>Increase \$</b>	<b>Increase %</b>
<b>Rate Impacts</b>				
Base Rate	\$ 36.65	\$ 42.21	\$ 5.56	15.17%
Tier 1 Rate (per 1,000 Gallons, up to 11,000 Gallons/Mo.)	4.83	5.08	0.25	5.18%
Tier 2 Rate (per 1,000 Gallons, from 11,000 to 50,000 Gallons/Mo.)	5.37	5.65	0.28	5.21%
Tier 3 Rate (per 1,000 Gallons, over 50,000 Gallons/Mo.)	5.71	6.01	0.30	5.25%
<b>Bill Impacts</b>				
3,000 Gallons	\$ 51.14	\$ 57.45	\$ 6.31	12.34%
4,000 Gallons	55.97	62.53	6.56	11.72%
5,000 Gallons	60.80	67.61	6.81	11.20%
6,000 Gallons	65.63	72.69	7.06	10.76%
7,000 Gallons	70.46	77.77	7.31	10.37%
8,000 Gallons	75.29	82.85	7.56	10.04%
9,000 Gallons	80.12	87.93	7.81	9.75%
10,000 Gallons	84.95	93.01	8.06	9.49%
11,000 Gallons	89.78	98.09	8.31	9.26%
12,000 Gallons	95.15	103.74	8.59	9.03%
13,000 Gallons	100.52	109.39	8.87	8.82%
14,000 Gallons	105.89	115.04	9.15	8.64%
15,000 Gallons	111.26	120.69	9.43	8.48%
16,000 Gallons	116.63	126.34	9.71	8.33%
17,000 Gallons	122.00	131.99	9.99	8.19%
18,000 Gallons	127.37	137.64	10.27	8.06%
19,000 Gallons	132.74	143.29	10.55	7.95%
20,000 Gallons	138.11	148.94	10.83	7.84%
21,000 Gallons	143.48	154.59	11.11	7.74%
22,000 Gallons	148.85	160.24	11.39	7.65%



**5/8" Commercial Customer**

5/8" Commercial Customer	Current		Proposed		Increase \$	Increase %	
Rate Impacts							
Base Rate	\$	36.65	\$	42.21	\$	5.56	15.17%
All Gallons (per 1,000 Gallons)		5.71		5.94		0.23	4.03%
Bill Impacts							
5,000 Gallons	\$	65.20	\$	71.91	\$	6.71	10.29%
10,000 Gallons		93.75		101.61		7.86	8.38%
15,000 Gallons		122.30		131.31		9.01	7.37%
20,000 Gallons		150.85		161.01		10.16	6.74%
25,000 Gallons		179.40		190.71		11.31	6.30%
30,000 Gallons		207.95		220.41		12.46	5.99%
35,000 Gallons		236.50		250.11		13.61	5.75%
40,000 Gallons		265.05		279.81		14.76	5.57%
45,000 Gallons		293.60		309.51		15.91	5.42%
50,000 Gallons		322.15		339.21		17.06	5.30%
55,000 Gallons		350.70		368.91		18.21	5.19%
60,000 Gallons		379.25		398.61		19.36	5.10%
65,000 Gallons		407.80		428.31		20.51	5.03%
70,000 Gallons		436.35		458.01		21.66	4.96%
75,000 Gallons		464.90		487.71		22.81	4.91%
80,000 Gallons		493.45		517.41		23.96	4.86%
85,000 Gallons		522.00		547.11		25.11	4.81%
90,000 Gallons		550.55		576.81		26.26	4.77%
95,000 Gallons		579.10		606.51		27.41	4.73%
100,000 Gallons		607.65		636.21		28.56	4.70%

<b>5/8" Irrigation Customer</b>	<b>Current</b>	<b>Proposed</b>	<b>Increase \$</b>	<b>Increase %</b>
<b>Rate Impacts</b>				
Base Rate	\$ 36.65	\$ 47.06	\$ 10.41	28.40%
Tier 1 Rate (per 1,000 Gallons, Up to 50,000 Gallons)	5.37	6.90	1.53	28.49%
Tier 2 Rate (per 1,000 Gallons, Over 50,000 Gallons)	5.71	7.33	1.62	28.37%
<b>Bill Impacts</b>				
15,000 Gallons	\$ 117.20	\$ 150.56	\$ 33.36	28.46%
20,000 Gallons	144.05	185.06	41.01	28.47%
25,000 Gallons	170.90	219.56	48.66	28.47%
30,000 Gallons	197.75	254.06	56.31	28.48%
35,000 Gallons	224.60	288.56	63.96	28.48%
40,000 Gallons	251.45	323.06	71.61	28.48%
45,000 Gallons	278.30	357.56	79.26	28.48%
50,000 Gallons	305.15	392.06	86.91	28.48%
55,000 Gallons	333.70	428.71	95.01	28.47%
60,000 Gallons	362.25	465.36	103.11	28.46%
65,000 Gallons	390.80	502.01	111.21	28.46%
70,000 Gallons	419.35	538.66	119.31	28.45%
75,000 Gallons	447.90	575.31	127.41	28.45%
80,000 Gallons	476.45	611.96	135.51	28.44%
85,000 Gallons	505.00	648.61	143.61	28.44%
90,000 Gallons	533.55	685.26	151.71	28.43%
95,000 Gallons	562.10	721.91	159.81	28.43%
100,000 Gallons	590.65	758.56	167.91	28.43%
105,000 Gallons	619.20	795.21	176.01	28.43%
110,000 Gallons	647.75	831.86	184.11	28.42%

<b>Golf - Potable</b>	<b>Current</b>	<b>Proposed</b>	<b>Increase \$</b>	<b>Increase %</b>
<b>Rate Impacts</b>				
Base Rate	\$ 871.45	\$ 1,118.94	\$ 247.49	28.40%
All Gallons (per 1,000 Gallons)	5.71	7.33	1.62	28.37%
<b>Bill Impacts</b>				
25,000 Gallons	\$ 1,014.20	\$ 1,302.19	\$ 287.99	28.40%
50,000 Gallons	1,156.95	1,485.44	328.49	28.39%
75,000 Gallons	1,299.70	1,668.69	368.99	28.39%
100,000 Gallons	1,442.45	1,851.94	409.49	28.39%
125,000 Gallons	1,585.20	2,035.19	449.99	28.39%
150,000 Gallons	1,727.95	2,218.44	490.49	28.39%
175,000 Gallons	1,870.70	2,401.69	530.99	28.38%
200,000 Gallons	2,013.45	2,584.94	571.49	28.38%
225,000 Gallons	2,156.20	2,768.19	611.99	28.38%
250,000 Gallons	2,298.95	2,951.44	652.49	28.38%
275,000 Gallons	2,441.70	3,134.69	692.99	28.38%
300,000 Gallons	2,584.45	3,317.94	733.49	28.38%
325,000 Gallons	2,727.20	3,501.19	773.99	28.38%
350,000 Gallons	2,869.95	3,684.44	814.49	28.38%
375,000 Gallons	3,012.70	3,867.69	854.99	28.38%
400,000 Gallons	3,155.45	4,050.94	895.49	28.38%
425,000 Gallons	3,298.20	4,234.19	935.99	28.38%
450,000 Gallons	3,440.95	4,417.44	976.49	28.38%
475,000 Gallons	3,583.70	4,600.69	1,016.99	28.38%
500,000 Gallons	3,726.45	4,783.94	1,057.49	28.38%

<b>Golf - Well</b>	<b>Current</b>	<b>Proposed</b>	<b>Increase \$</b>	<b>Increase %</b>
<b>Rate Impacts</b>				
Base Rate	\$ 1,138.80	\$ 1,462.22	\$ 323.42	28.40%
All Gallons (per 1,000 Gallons)	0.30	0.39	0.09	30.00%
<b>Bill Impacts</b>				
100,000 Gallons	\$ 1,168.80	\$ 1,501.22	\$ 332.42	28.44%
200,000 Gallons	1,198.80	1,540.22	341.42	28.48%
300,000 Gallons	1,228.80	1,579.22	350.42	28.52%
400,000 Gallons	1,258.80	1,618.22	359.42	28.55%
500,000 Gallons	1,288.80	1,657.22	368.42	28.59%
600,000 Gallons	1,318.80	1,696.22	377.42	28.62%
700,000 Gallons	1,348.80	1,735.22	386.42	28.65%
800,000 Gallons	1,378.80	1,774.22	395.42	28.68%
900,000 Gallons	1,408.80	1,813.22	404.42	28.71%
1,000,000 Gallons	1,438.80	1,852.22	413.42	28.73%
1,100,000 Gallons	1,468.80	1,891.22	422.42	28.76%
1,200,000 Gallons	1,498.80	1,930.22	431.42	28.78%
1,300,000 Gallons	1,528.80	1,969.22	440.42	28.81%
1,400,000 Gallons	1,558.80	2,008.22	449.42	28.83%
1,500,000 Gallons	1,588.80	2,047.22	458.42	28.85%
1,600,000 Gallons	1,618.80	2,086.22	467.42	28.87%
1,700,000 Gallons	1,648.80	2,125.22	476.42	28.89%
1,800,000 Gallons	1,678.80	2,164.22	485.42	28.91%
1,900,000 Gallons	1,708.80	2,203.22	494.42	28.93%
2,000,000 Gallons	1,738.80	2,242.22	503.42	28.95%

<b>5/8" Residential Customer</b>	<b>Current</b>	<b>Proposed</b>	<b>Increase \$</b>	<b>Increase %</b>
<b>Rate Impacts</b>				
Base Rate	\$ 28.00	\$ 30.72	\$ 2.72	9.71%
Tier 1 Rate (per 1,000 Gallons, up to 11,000 Gallons/Mo.)	0.74	0.81	0.07	9.46%
All Other Gallons	-	-	-	n/a
<b>Bill Impacts</b>				
3,000 Gallons	\$ 30.22	\$ 33.15	\$ 2.93	9.70%
4,000 Gallons	30.96	33.96	3.00	9.69%
5,000 Gallons	31.70	34.77	3.07	9.68%
6,000 Gallons	32.44	35.58	3.14	9.68%
7,000 Gallons	33.18	36.39	3.21	9.67%
8,000 Gallons	33.92	37.20	3.28	9.67%
9,000 Gallons	34.66	38.01	3.35	9.67%
10,000 Gallons	35.40	38.82	3.42	9.66%
11,000 Gallons	36.14	39.63	3.49	9.66%
12,000 Gallons	36.14	39.63	3.49	9.66%
13,000 Gallons	36.14	39.63	3.49	9.66%
14,000 Gallons	36.14	39.63	3.49	9.66%
15,000 Gallons	36.14	39.63	3.49	9.66%
16,000 Gallons	36.14	39.63	3.49	9.66%
17,000 Gallons	36.14	39.63	3.49	9.66%
18,000 Gallons	36.14	39.63	3.49	9.66%
19,000 Gallons	36.14	39.63	3.49	9.66%
20,000 Gallons	36.14	39.63	3.49	9.66%
21,000 Gallons	36.14	39.63	3.49	9.66%
22,000 Gallons	36.14	39.63	3.49	9.66%

<b>5/8" Commercial Customer</b>	<b>Current</b>	<b>Proposed</b>	<b>Increase \$</b>	<b>Increase %</b>
<b>Rate Impacts</b>				
Base Rate	\$ 28.00	\$ 30.40	\$ 2.40	8.57%
All Gallons (per 1,000 Gallons)	2.86	3.11	0.25	8.74%
<b>Bill Impacts</b>				
5,000 Gallons	\$ 42.30	\$ 45.95	\$ 3.65	8.63%
10,000 Gallons	56.60	61.50	4.90	8.66%
15,000 Gallons	70.90	77.05	6.15	8.67%
20,000 Gallons	85.20	92.60	7.40	8.69%
25,000 Gallons	99.50	108.15	8.65	8.69%
30,000 Gallons	113.80	123.70	9.90	8.70%
35,000 Gallons	128.10	139.25	11.15	8.70%
40,000 Gallons	142.40	154.80	12.40	8.71%
45,000 Gallons	156.70	170.35	13.65	8.71%
50,000 Gallons	171.00	185.90	14.90	8.71%
55,000 Gallons	185.30	201.45	16.15	8.72%
60,000 Gallons	199.60	217.00	17.40	8.72%
65,000 Gallons	213.90	232.55	18.65	8.72%
70,000 Gallons	228.20	248.10	19.90	8.72%
75,000 Gallons	242.50	263.65	21.15	8.72%
80,000 Gallons	256.80	279.20	22.40	8.72%
85,000 Gallons	271.10	294.75	23.65	8.72%
90,000 Gallons	285.40	310.30	24.90	8.72%
95,000 Gallons	299.70	325.85	26.15	8.73%
100,000 Gallons	314.00	341.40	27.40	8.73%

Hotel per Room	Current		Proposed		Increase \$	Increase %	
Rate Impacts							
per Room	\$	11.19	\$	12.15	\$	0.96	8.58%
All Gallons (per 1,000 Gallons)		2.86		3.11		0.25	8.74%
Bill Impacts							
1,000 Gallons	\$	14.05	\$	15.26	\$	1.21	8.61%
2,000 Gallons		16.91		18.37		1.46	8.63%
3,000 Gallons		19.77		21.48		1.71	8.65%
4,000 Gallons		22.63		24.59		1.96	8.66%
5,000 Gallons		25.49		27.70		2.21	8.67%
6,000 Gallons		28.35		30.81		2.46	8.68%
7,000 Gallons		31.21		33.92		2.71	8.68%
8,000 Gallons		34.07		37.03		2.96	8.69%
9,000 Gallons		36.93		40.14		3.21	8.69%
10,000 Gallons		39.79		43.25		3.46	8.70%
11,000 Gallons		42.65		46.36		3.71	8.70%
12,000 Gallons		45.51		49.47		3.96	8.70%
13,000 Gallons		48.37		52.58		4.21	8.70%
14,000 Gallons		51.23		55.69		4.46	8.71%
15,000 Gallons		54.09		58.80		4.71	8.71%
16,000 Gallons		56.95		61.91		4.96	8.71%
17,000 Gallons		59.81		65.02		5.21	8.71%
18,000 Gallons		62.67		68.13		5.46	8.71%
19,000 Gallons		65.53		71.24		5.71	8.71%
20,000 Gallons		68.39		74.35		5.96	8.71%

<b>Effluent Customers</b>	<b>Current</b>	<b>Proposed</b>	<b>Increase \$</b>	<b>Increase %</b>
<b>Rate Impacts</b>				
Base Rate	\$ 4,648.72	\$ 5,968.96	\$ 1,320.24	28.40%
All Gallons (per 1,000 Gallons)	0.20	0.26	0.06	30.00%
<b>Bill Impacts</b>				
1,000 Gallons	\$ 4,648.92	\$ 5,969.22	\$ 1,320.30	28.40%
2,000 Gallons	4,649.12	5,969.48	1,320.36	28.40%
3,000 Gallons	4,649.32	5,969.74	1,320.42	28.40%
4,000 Gallons	4,649.52	5,970.00	1,320.48	28.40%
5,000 Gallons	4,649.72	5,970.26	1,320.54	28.40%
6,000 Gallons	4,649.92	5,970.52	1,320.60	28.40%
7,000 Gallons	4,650.12	5,970.78	1,320.66	28.40%
8,000 Gallons	4,650.32	5,971.04	1,320.72	28.40%
9,000 Gallons	4,650.52	5,971.30	1,320.78	28.40%
10,000 Gallons	4,650.72	5,971.56	1,320.84	28.40%
11,000 Gallons	4,650.92	5,971.82	1,320.90	28.40%
12,000 Gallons	4,651.12	5,972.08	1,320.96	28.40%
13,000 Gallons	4,651.32	5,972.34	1,321.02	28.40%
14,000 Gallons	4,651.52	5,972.60	1,321.08	28.40%
15,000 Gallons	4,651.72	5,972.86	1,321.14	28.40%
16,000 Gallons	4,651.92	5,973.12	1,321.20	28.40%
17,000 Gallons	4,652.12	5,973.38	1,321.26	28.40%
18,000 Gallons	4,652.32	5,973.64	1,321.32	28.40%
19,000 Gallons	4,652.52	5,973.90	1,321.38	28.40%
20,000 Gallons	4,652.72	5,974.16	1,321.44	28.40%



## **APPENDIX 1**

### **LIST OF TESTIMONY, EXPERT PROCEEDINGS, AND ENGAGEMENTS BY CHARLES E. LOY, CPA**

**EDUCATION:** BBA Accounting, University of Texas at Austin  
Certified Public Accountant, Texas

**PROFESSIONAL MEMBERSHIPS:**

American Water Works Association  
National Association of Water Companies  
Water Environment Federation  
Texas Society of Certified Public Accountants  
American Gas Association  
American Public Gas Association  
Texas Gas Association

**EXPERIENCE:**

Mr. Loy has over 25 years' of experience helping organizations meet challenges arising in both regulated and competitive environments within in the utility industry.

2001-Present GDS Associates, Inc.: Principal – Mr. Loy started with GDS in June of 2001. His focus is on regulatory accounting and finance. He is experienced in water, wastewater, natural gas, and electric regulatory and accounting matters. Mr. Loy assisted a number of water, wastewater and gas distribution clients with rate case filings before various regulatory authorities in a number of states. He has assisted with the financial analysis of wholesale purchase power and retail aggregation projects as a result of the deregulation of the electric industry in Texas. He has conducted analysis and developed recommendations regarding the Southwest Power Administration's rate increase on behalf of member clients. He has participated in a number of natural gas and electric projects involving rate increases, wholesale rates, acquisition analysis and other special projects.

1999-2001 AquaSource Inc.: General Manager Rates and Regulatory Affairs - AquaSource Inc., a wholly owned subsidiary of DQE Inc and parent of Duquesne Light. AquaSource was formed in 1997 to take advantage of the consolidation in the water and wastewater industries and spent three years and more than \$400 million acquiring water and wastewater companies. Mr. Loy's duties included directing the compilation and filing of rate cases, acquisition analyses and related filings, regulatory commission/governmental relations in the twelve states in which AquaSource operates. Additionally, he supervised a professional staff located throughout the country and assisted in business development, developer contract negotiations and other special projects. His appointment came in the middle of AquaSource's aggressive acquisition phase. Accordingly, his first year was spent primarily working to clean up a very chaotic regulatory situation.

1993-1999 Citizens Utilities Company: Manager, Regulatory Affairs – Mr. Loy served as Project Manager of numerous multiple-company water and wastewater rate case filings, in Ohio, Illinois, Pennsylvania and Arizona. In those cases, he prepared and presented testimony, developed revenue requirement calculations, generated revenue and expense pro forma adjustments, performed working capital lead/lag studies, and evaluated rate design/cost of service issues. He proposed surcharge mechanisms for purchased water, a reverse osmosis process, and contract waste treatment. Additionally, Mr. Loy designed and directed the development of the multiple company revenue requirement models that generated filing schedules. In the fall of 1997, Citizens promoted Mr. Loy to Manager Regulatory Affairs. In the new position, he supervised the staff responsible for all regulatory activity involving gas, electric and water/wastewater in ten states. He was a key member of a team that negotiated a multimillion dollar water and wastewater agreement with a major developer in Phoenix on behalf of Citizens.

- 1989-1993 Southern Union Gas Company: Rate Manager – Mr. Loy joined Southern Union as Sr. Internal Auditor. In that capacity, he contributed to multiple projects pertaining to the upcoming merger with a large publicly traded corporation. These projects included supervising audits of gas purchases, accounts receivable, accounts payable and oil and gas holdings. He was promoted to Rate Manager reporting to the Vice President of Regulatory Affairs. In that capacity, he supervised a team of four directing the preparation and implementation of 16 rate increase applications before various municipal and state regulatory bodies, and led negotiating sessions with elected and municipal officials. In addition to improving efficiency, he developed several rate mechanisms that resulted in increased earnings. One such efficiency was the Weather Normalization Adjustment Clause (WNAC). By eliminating weather-sensitive fluctuations, the WNAC increased earnings as much as 12%. He also developed a Cost of Service Adjustment Clause (CSAC) which was established in several smaller municipal jurisdictions. The CSAC allowed annual rate increases without the time and expense of major rate filings. Also, Mr. Loy performed analysis and due diligence for numerous municipal and private acquisitions.
- 1987-1989 Diversified Utility Consultants, Inc.: Sr. Accounting Analyst - Diversified Utility Consultants (DUC) is a consulting firm which represents consumers' interests in rate case proceedings. The firm's clients include municipalities and various state-supported consumer agencies. As a Sr. Accounting Analyst, Mr. Loy worked on seven electric rate cases, two gas rate cases and one water rate case.
- Prior to 1987 Mr. Loy spent summers in college rough necking, both offshore and onshore, on oil and gas drilling rigs. His first job after college was in the oil & gas industry where he started in accounts receivable and specialized in collecting past due accounts. He was in the Joint Interest Auditing Department where he reviewed drilling costs and negotiated refunds for the company and its joint interest owners.

### **Regulatory Experience:**

Mr. Loy has presented testimony and/or participated in cases before the following regulatory bodies:

Pennsylvania Public Utility Commission – Water/Wastewater, Steam  
Public Utilities Commission of Ohio – Water/Wastewater, Gas  
Indiana Regulatory Commission – Water/Wastewater  
Idaho Public Utilities Commission- Water  
Illinois Commerce Commission – Water/Wastewater  
Arizona Corporation Commission – Water/Wastewater, Conservation Rates, Reclaimed Water  
Arkansas Public Utility Commission - Water  
Oklahoma Corporation Commission – Gas  
Hawaii Public Utilities Commission – Water/Wastewater  
Texas Railroad Commission - Gas  
Texas Public Utilities Commission – Electric, Water/Wastewater  
Texas Commission on Environmental Quality – Water/Wastewater, Conservation Rates  
Delaware Public Service Commission – Water, Conservation Rates  
New Mexico Public Regulation Commission – Water/Wastewater, Conservation rates  
New York Public Service Commission – Water  
Public Service Commission of Montana - Gas  
Public Service Commission of South Carolina – Water/Wastewater  
Public Service Commission of West Virginia - Gas  
Connecticut Department of Public Utility Control - Water  
New Jersey Board of Public Utilities - Water  
El Paso Public Utilities Board – Gas  
Federal Energy Regulatory Commission -Gas

**WATER/WASTEWATER/GAS/ELECTRIC EXPERIENCE  
LIST OF TESTIMONY, EXPERT PROCEEDINGS, AND ENGAGEMENTS BY  
CHARLES E. LOY, CPA**

**WATER UTILITY RATES AND REGULATION EXPERIENCE**

**Arizona Corporation Commission**

Docket No. WS-01303A-006-0403

Presented testimony, prepared the Cost of Service study and rate design on behalf of Arizona-American Sun City and Sun City West Wastewater rate request.

Docket No. WS-01303A-06-0403

Presented testimony, prepared the Cost of Service study and rate design on behalf of Arizona-American Anthem/Aqua Fria Water and Wastewater rate request.

Docket No. WS-01303A-06-0014

Presented testimony, prepared the Cost of Service study, rate design, and assisted with the preparation of the revenue requirements on behalf of Arizona-American Mohave Water and Wastewater rate request.

Docket No. W-01656A-98-0577, SW-02334A-98-0577

Presented testimony for approval of a Central Arizona Project Water utilization plan, the implementation of a Groundwater Savings Fee and the recovery of deferred project costs.

Docket WS-02334A-98-0569

Presented a filing for the approval of an agreement relating to a wastewater plant de-nitrification project with the Sun City Recreation Centers and Del Webb Corporation.

Docket U-3454-97-599

Prepared and presented a filing for the approval of a CCN to provide water and wastewater services to Del Webb's Anthem project and the approval of two related agreements.

Docket No. E-1032-95-417 ET AL.

Presented testimony and prepared the rate filing on behalf of Citizens Utilities Maricopa County water properties 1995 rate request.

**Arkansas Public Service Commission**

Docket No. 09-130-U

Presented pro forma adjustments to revenues and prepared the Cost of Service study and rate design on behalf of United Water Arkansas's 2009 rate request.

Docket No. 06-160-U

Presented testimony, prepared the Cost of Service study and rate design on behalf of United Water Arkansas's 2006 rate request.

Docket No. 03-161-U

Presented testimony, prepared the Cost of Service study, rate design, and assisted with the preparation of the revenue requirements on behalf of United Water Arkansas's 2003 rate request.

**Connecticut Department of Public Utility Control**

Docket No. 07-05-44

Prepared the rate filing and supporting testimony on behalf of United Water Connecticut's 2007 water rate request.

**Public Service Commission of South Carolina**

Docket No. 2019 -281-S

Represented the Commission Staff in the analysis and recommended accounting treatment of a IOU's purchase of donated property from a Municipality.

Docket No. 2014-346-WS

Represented ratepayers in Daufuskie Island Utility Company's 2014 Request for Increase for Water and Sewer Rates and in the Rehearing or Supreme Court Remand in 2017. Filed Testimony in both proceedings.

**Public Service Commission of Delaware**

PSC Docket No. 16-0163

Presented testimony, prepared the Revenue Requirements Schedules, Cost of Service study and rate design on behalf of SUEZ Water Delaware's 2016 rate request

PSC Docket No. 09-60

Presented testimony, prepared the Cost of Service study and rate design on behalf of United Water Delaware's 2009 rate request.

PSC Docket No. 06-174

resented testimony, prepared the Cost of Service study, rate design, revenue normalization and cash working capital requirements on behalf of United Water Delaware's 2006 rate request.

**Hawaii Public Utilities Commission**

Docket 2019-0057

Filed testimony on revenue requirements, rate design and original cost trending study on behalf of Kalaeloa Water Company's water and wastewater systems.

**Idaho Public Utilities Commission**

Case No. UWI-W-09-01

Presented testimony, prepared revenue and expense pro forma adjustments, and proposed rate design on behalf of United Water Idaho, Inc. 2010 rate request.

**Indiana Utility Regulatory Commission**

Cause No. 41842

Prepared the filing and presented testimony for the Petition of Utility Center Inc. for the recovery of Distribution System Improvement Charges -2001

Cause No. 41559

Prepared the filing and presented testimony for a Certificate of Territorial Authority to render Sewage service.- 2000

Cause No. 41968

Directed the preparation of Utility Center Inc.' request for authority to increase its rates and charges for water and sewer service. -2000

**Illinois Commerce Commission**

Docket No. 94-0481

Presented testimony and prepared the filing on behalf of Citizens Utilities Company of Illinois 1994 rate request.

Docket No. 95-0633

Presented testimony on behalf of Citizens Utilities Company of Illinois in Tudor Park Apartments vs. Citizens Utilities of Illinois.- 1995

Docket No. 97-0372

Presented testimony on behalf of Citizens Utilities of Illinois in the Application for Consent to and Approval of a Contract with Affiliated Interests. 1997

**State Board of New Jersey Public Utilities**

BPU Docket No. WRO702125

Prepared and presented testimony on the determination of the cash working capital requirements on behalf of United Water New Jerseys 2007 rate request.

**New Mexico Public Regulation Commission**

Case No. 18-00124-UT

Presented testimony and assisted with the preparation of the water rate filing on behalf of EPCOR Water New Mexico Clovis District 2018/2019 Rate Request

Case No. 11-00196-UT

Presented testimony and assisted with the preparation of the water rate filing on behalf of New Mexico American Water Company Clovis District 2011 Rate Request

Case No. 09-00156-UT

Presented testimony and prepared the water rate filing on behalf of New Mexico American Water Company Edgewood District 2009 Rate Request

Case No. 07-00435-UT

Presented testimony and prepared the water and wastewater rate filing on behalf of New Mexico Utilities Inc.2007 Rate Request

Case No. 08-00134-UT

Presented testimony and prepared the water rate filing on behalf of New Mexico –American Water Co.2008 Rate Request

**New York Public Service Commission**

Presented testimony, prepared the Cost of Service study and rate design on behalf of United Water New Rochelle's 2010 rate request.

**Public Utilities Commission of Ohio**

Docket No. 98-178-WS-AIR

Presented testimony and prepared the filing on behalf of Citizens Utilities Company of Ohio 1998 rate request.

Docket No. 94-1237

Presented testimony and prepared the filing on behalf of Citizens Utilities Company of Ohio 1994 rate request.

**Pennsylvania Public Utility Commission**

Docket Nos. R-2018-3002645 and R-2018-3002647

Filed testimony on behalf of People's Natural Gas of Pittsburgh regarding Pittsburgh Water and Sewer Authority's 2018 rate increase request.

Docket No. R-2009-2122887

Presented testimony, prepared the Cost of Service study and rate design on behalf of United Water Pennsylvania's 2009 rate request.

Docket No. R-00051186

Assisted with analysis/filing preparation of United Water Pennsylvania, Inc. 2005 Rate Case.

Docket No. R-00953300

Presented testimony on behalf of Citizens Utilities Company of Pennsylvania 1995 rate request.

**Public Utility Commission of Texas**

Docket 50197

Application for a 2019 Water Rate Tariff Change for Timbercrest Partners LLC. Prepared the application for a Class B Water Utility.

Docket 49367

Petition by Out of District Ratepayers Appealing the Water Rates Established by the El Paso Water Control and Improvement District No. 4. Filed an Affidavit on behalf of the WCID and assisted in settlement negotiations.

Docket 49892

Application for a 2019 Water Rate Tariff Change for Concho Rural Water Corporation. Prepared the application for a Class B Water Utility.

Docket 47680

Application for a 2018 Sewer Rate Tariff Change of Bolivar Utility Services Assisted with the preparation of the application and filed supporting testimony.

Docket 43242

Application for a 2014 Water Rate Tariff Change of Wiedenfeld Water Works. Prepared the application and filed testimony

Docket 44911

Application for a 2015 Sewer Rate Tariff Change of Bolivar Utility Services. Assisted in the preparation of the application

Docket 44809

Application for a 2015 Water/Sewer Rate Tariff Change of Quadvest LP. Prepared the application and filed testimony

Docket 47680

Application for a 2018 Sewer Rate Tariff Change of Bolivar Utility Services. Assisted in the preparation of the application and filed testimony



**Texas Commission of Environmental Quality**

SOAH Docket 582-14-3415

Application for a 2013 Water Rate/Tariff Change of Canyon Lake Water Service Company  
Prepared the application and filed testimony on behalf of Canyon Lake WSC.

SOAH Docket No. 582-14-3384

Application for a 2013 Water and Sewer Rate/Tariff Change of SWWC Inc.  
Prepared application on behalf of SWWC, Inc.

SOAH 582-14-3381

Application for a 2013 Water and Sewer Rate/Tariff Change of Monarch Utilities LP  
Prepared application on behalf of SWWC, Inc.

SOAH Docket No. 582-12-0224

STM Application of Monarch Utilities I, L.P. to Transfer Water and Sewer Facilities and Certificates of Convenience and Necessity – provided assistance

Application 37531-R

Application for a Water Rate/Tariff Change of Quadvest L.P. Prepared application on behalf of Quadvest L.P.  
Prepared application on behalf of Quadvest L.P.

Applications 37507-R and 37508-R

Application for a Water and Sewer Rate/Tariff Change of Ranch Utilities, Inc. Prepared application on behalf of Ranch Utilities, Inc.

Application 37317-R

Application for a Water Rate/Tariff Change of Wiedenfeld Water Works, Inc. Prepared application on behalf of Wiedenfeld Water Works, Inc.

Applications 37234-R and 37235-R

Application for a Water and Sewer Rate/Tariff Change of Aqua Texas, Inc. North and Southwest Regions  
Prepared application on behalf of Aqua Texas, Inc.

SOAH Docket No, 582-12-0224

Application for a Water and Sewer Rate/Tariff Change of Monarch Utilities LP  
Prepared application on behalf of SWWC, Inc.

SOAH Docket No. 582-11-1468

Application for a 2010 Water Rate/Tariff Change of Canyon Lake Water Service Company  
Prepared the application and filed testimony on behalf of Canyon Lake WSC.

SOAH Docket No. 582-11-1458

Application for a Water and Sewer Rate/Tariff Change of Aqua Texas, Inc. Southeast Region  
Prepared application on behalf of Aqua Texas, Inc.

Docket No. 0580-UCR

Application for a 2009 Water Rate/Tariff Change of Canyon Lake Water Service Company  
Prepared the application on behalf of Canyon Lake WSC.



***Texas Commission of Environmental Quality-cont.***

Docket No. 35850-R

Application for a 2007 Water Rate/Tariff Change of Canyon Lake Water Service Company  
Prepared the application on behalf of Canyon Lake WSC.

Docket No. 33763-R

Application for a 2007 Water and Sewer Rate/Tariff Change of Midway, Inc. For the City of Oak Point Service area. Filing initially made with the City of Oak Point.

Docket Nos. 35748-R & 35747-R

Application for a Water and Sewer Rate/Tariff Change of Monarch Utilities LP  
Prepared the application on behalf of Monarch.

Docket No. 2006-0072-UCR

Application for a Water and Sewer Rate/Tariff Change of Aqua Texas, Inc  
Prepared application and presented testimony on behalf of Aqua Texas, Inc.

Docket No. 2007-0478-UCR

Application for a Water and Sewer Rate/Tariff Change of Texas American Water Inc.  
Prepared the application on behalf of Texas American Water.

Docket No. 2005-0114-UCR

Application for a Water and Sewer Rate/Tariff Change of Aqua Texas, Inc  
Presented Testimony on behalf of Aqua Texas, Inc.

Docket No. 2004-2029-UCR

Application for a Water and Sewer Rate/Tariff Change of Walker Water Works, Inc.  
Prepared the application on behalf of Texas American Water.

Application Nos. 34658-R & 34659-R

Application for a Water and Sewer Rate/Tariff Change of Southwest Utilities, Inc.  
Prepared the application on behalf of Texas American Water.

Docket Nos. 2000-1074-UCR, 2000-1075-UCR, 2000-1366 UCR through 2000-1369 UCR

Assisted in the preparation and presentation of the Aqua Source 2000 rate increase

Application No. 7371-R (Texas Water Commission)

Assisted in the analysis of Southern Utilities 1988 rate request on the behalf of Southern Utilities customers.

**Other Water Related Engagements and Expert Proceedings**

*Ector County Municipal Utility District*

*Assisted with wholesale water rate contract negotiations with the City of Odessa*

*South Carolina Office of Regulatory Staff*

*Assisted with the review of Palmetto Utilities Inc. Certain Assets Purchased from City of Columbia*

***Other Water Related Engagements and Expert Proceedings-cont.***

*The Landings Association – Savannah, Georgia*

Assist with the annual review of water and sewer rate adjustments proposed by Utilities Inc of Georgia according to Settlement Agreement

*The City of Hutto, Texas*

Independent Assessment of Proposed Acquisition of Groundwater Supply by the City of Hutto

*Woodland Oaks Utilities, Conroe Texas*

Assist with the Texas PUC Transition

*City of Laurens, South Carolina*

Developed cost of service and rate design study 2018

*City of Clinton, South Carolina*

Developed cost of service and rate design study 2016/2017

*City of Alexandria, Louisiana*

Financial review, allocated cost of service and rate study for the gas system 2012/2013

*Town of Providence Village, Texas*

Developed Expert Witness Report for Denton County Court Cause No. 2011-60876-393  
Analysis of Agreements between Mustang SUD and Providence Village WCID

*City of Page, Arizona*

Developed retail water and wastewater rate model, recommended retail water and wastewater rates and provided results and recommendations in a written report and presentation to the City of Page Council

*Mitchell County Utility, Texas*

Assist with divestiture of water utility assets

*City of Longview, Texas*

Ongoing assistance with development of annual formulary wholesale water and wastewater rates.

*Aqua Texas, Inc.*

Calculations and updates of Regional Uniform CIAC Fees

*Dripping Springs WSC, Hays County WCID 1&2*

Review and analysis of West Travis County Public Utility Agency wholesale rate cost of service and rate increase 2012.

***Other Water Related Engagements and Expert Proceedings-cont.***

***SWWC Inc.***

- Decertification analysis and valuation of the CCN for Crosswinds development area.
- Decertification analysis and valuation of the CCN for TXI development area.
- Decertification analysis and valuation of the CCN for Tower Terrace/Kilgore Tract development area.
- Decertification analysis and valuation of the CCN for Villages at Warner Ranch development area.
- Long term forecast of all components of the revenue requirements of all Texas utilities

***Crystal Clear WSC***

Decertification analysis and valuation of the CCN for Texas GLO development area around New Braunfels Texas

***Woodbine Development Corp.***

Analysis and assistance with LCRA Windmill Ranch wholesale wastewater services contract renegotiations.

***Rebecca Creek MUD***

Before and after rate comparison, analysis and forecast regarding the merger proposed by Canyon Lake Water Supply Company.

***Global Water Resources***

Expert witness before American Arbitration Association regarding the financial standing and regulatory status of Global Water.

***Corix Utilities***

Assistance with bid preparation and analysis regarding the LCRA retail water and wastewater divestiture.

***Golden State Water Company***

Assistance with bid concerning divestiture of SWWC Inc.

***United Water Management and Services***

Developed report regarding Texas IOU regulation for internal assessment of the Texas water regulatory status.

***Austin Apartment Association***

Represented the Multi-Family water and wastewater classes in the City of Austin's Public Involvement Committee to review the 2017 water and wastewater rate study.

***Greater Austin Water Forum***

Assisted industrial class water users with analysis and participation in the City of Austin 2008 Cost of Service Study.

***Other Water Related Engagements and Expert Proceedings-cont.***

***New Mexico Utilities***

Review/analysis and critique report on Albuquerque Bernalillo County Water Utility Authority's Cost of Service Wholesale Wastewater Rate Model

***Hays County Water Control & Improvement District No. 1 and No. 2***

Developed 2015/2016 retail water and wastewater rate model, recommended retail water and wastewater rates and provided results and recommendations in a written report and presentation to the Boards of each utility.

**ELECTRIC UTILITY RATES AND REGULATION EXPERIENCE**

**Public Utility Commission of Texas**

Docket No, 51611

Prepared a cash working capital study and testimony on behalf of Sharyland Utilities L.L.C's's 2020 Rate Application to establish transmission rates.

Docket No.51546

Prepared the 2019/2020 Application for Interim Update of Wholesale Transmission Rates and testimony for Wood County Electric COOP

Docket No.51526

Prepared the 2019/2020 Application for Update of Wholesale Transmission Rates and testimony for the Brownsville Public Utility Board.

Docket No.51195

Prepared the 2019/2020 Application for Interim Update of Wholesale Transmission Rates and testimony for Houston County Electric COOP

Docket No.50288

Prepared the 2018/2019 Application for Update of Wholesale Transmission Rates and testimony for the Kerrville Public Utility Board.

Docket No.50263

Prepared the 2018/2019 Application for Interim Update of Wholesale Transmission Rates and testimony for Houston County Electric COOP

Docket No. 49584

Prepared the 2018/2019 Application for Interim Update of Wholesale Transmission Rates and testimony for Pedernales Electric COOP

Docket No. 48840

Prepared the 2018/2019 Application for Interim Update of Wholesale Transmission Rates and testimony for Guadalupe Valley Electric COOP

***Public Utility Commission of Texas-cont.***

Docket No. 48002

Prepared the 2018 Application for Interim Update of Wholesale Transmission Rates and testimony for Guadalupe Valley Electric COOP

Docket No. 46710

Prepared the 2016/2017 Application for Interim Update of Wholesale Transmission Rates and testimony for Guadalupe Valley Electric COOP.

Docket No. 45414

Prepared a cash working capital study and testimony on behalf of Sharyland Utilities L.P.'s 2016 Rate Application to establish retail distribution rates.

Docket No. 43731

Prepared a cash working capital study and testimony on behalf of Cross Texas Transmission LLC 2015 Rate Application to establish rates.

Docket No. 41474

Prepared a cash working capital study and testimony on behalf of Sharyland Utilities L.P.'s 2013 Rate Application to establish retail distribution rates.

Docket No. 31250

Presented testimony and rate filing on behalf of Rio Grande Electrical Cooperatives 2005 Change in rates for wholesale transmission service.

Docket No. 8702

Assisted in the analysis of Gulf States Utilities 1987 rate request.

Docket 8646

Assisted in the analysis of Central Power & Light's 1988 rate request.

Docket 7661

Assisted in the analysis of the City of Fredericksburg's proposed amendment to Certificate of Convenience.

Docket 7510

Assisted in the analysis of West Texas Utilities Company's 1987 rate request.

**Federal Energy Regulatory Commission**

Docket No. ER88-202-0000

Assisted in the analysis of the Maine Yankee Atomic Power Plant Decommissioning.

Docket No. ER88-224-0000

Assisted in the analysis of the Carolina Power & Light Company Atomic Power Plant Decommissioning.

**City of Bryan**

- Developed and programmed data management system for the city electric department.

**City of Fredericksburg**

- Organized and performed an electric rate survey of Central Texas.
- Assisted in a load and rate design study.

**City of Austin**

- Assisted in the analysis of the City Electric Utility Department's 1989 rate request.

**Other Electric Related Engagements**

*Dynamic Energy Concepts Incorporated*

Assisted with the review of electric contracts, tariffs, analyzed usage data and assessed procurement practices for a number of US Veteran Hospitals across the country

*H.E. Butt Grocery Company*

Electricity procurement assistance and analysis of supply alternatives

*Martin Marietta Materials*

Electricity procurement assistance and analysis of supply alternatives

*C.H. Guenther & Son, Inc.*

Electricity procurement assistance and analysis of supply alternatives

*Van Tuyl, Inc.*

Electricity procurement assistance and analysis of supply alternatives

*Northeast Texas Electrical Cooperative*

- Ongoing review/analysis of Southwest Power Administration's annual Integrated Power Repayment Studies and resulting rates.
- Ongoing review/analysis of Southwest Electric Power Company's annual formulary wholesale rate adjustments.

*Tex-La Electric Cooperative*

- Ongoing review/analysis of Southwest Power Administration's annual Integrated Power Repayment Studies and resulting rates.
- Ongoing review/analysis of Southwest Electric Power Company's annual formulary wholesale rate adjustments

*Sam Rayburn G&T Electrical Cooperative*

- Ongoing review/analysis of Southwest Power Administration's annual Integrated Power Repayment Studies and resulting rates.
- Ongoing review/analysis of Southwest Power Administration's annual Robert D. Willis Power Repayment Studies and resulting rates.

*East Texas Electrical Cooperative*

- Ongoing review/analysis of Southwest Electric Power Company's annual formulary wholesale rate adjustments
- Ongoing review/analysis of Southwest Power Administration's annual Robert D. Willis Power Repayment Studies and resulting rates.

**GAS UTILITY RATES AND REGULATION EXPERIENCE**

**Railroad Commission of Texas**

GUD Docket OS-20-00005136

Prepared cost of service and rate design and testimony of behalf of CoServl Gas, Ltd 2020 application, to increase rates in the incorporated and unincorporated areas it serves.

GUD Docket OS-20-00004865

Prepared consolidated filing and testimony of behalf of Universal Natural Gas, Inc., to Increase and Consolidate Rates in the Unincorporated Areas Served by Universal Natural Gas, LLC, d/b/a Universal Natural Gas, Inc. Consumers Gas Company, LLC d/b/a Consumers Gas Company Inc., Enertex NB, LLC, and Gas Energy, LLC

GUD Docket OS-20-00004866

Prepared consolidated filing and testimony of behalf of Hooks Gas Pipeline, LLC to Increase and Consolidate Rates for Hooks Gas Pipeline, LLC, Texas Gas Pipeline Company, LLC, and 1486 Gas Pipeline, LLC

GUD Docket 10988

Prepared filing and testimony of behalf of EPCOR Texas Gas 2020 rate increase for the environs of the City of Magnolia.

GUD Docket 10190

Prepared filing and testimony of behalf of Hughes Natural Gas 2012 rate increase for the environs of the City of Magnolia.

GUD Docket 10083

Prepared filing and testimony of behalf of Hughes Natural Gas 2011 rate increase for the incorporated area of the City of Magnolia and environs.

GUD Docket 9731

Prepared filing and testimony of behalf of Hughes Natural Gas 2007 rate increase for the environs of the City of Magnolia.

GUD Docket 9488-9512

Prepared filing and testimony of behalf of West Texas Gas 2004 rate increase for the environs of cities served.



***Railroad Commission of Texas-cont.***

GUD Docket 8033

Filed testimony on behalf of Southern Union Gas Company's 1991 appeal for a rate increase in South Jefferson County.

GUD Docket 7878

Filed testimony and prepared the rate filing on behalf of Southern Union Gas Company's 1991 request for a rate increase in the Austin environs.

GUD Docket 6968

Assisted in the analysis of Southern Union Gas Company's 1987 appeal for a rate increase on the behalf of the City of Austin

**Public Service Commission of Montana**

Docket D2017.9.80

Filed testimony and prepared the cost of service and rate design, developed and explained the proposed Gas Infrastructure Reliability Clause (GIRC) and addressed the negative acquisition adjustment in the Energy West Montana's 2017/2018 rate filing.

**Public Utility Commission of Ohio**

Case Nos. 18-1720-GA-AIR; 18-1721-GA-ATA; 18-1722-GA-AAM

Filed testimony and prepared the cost of service and rate design, developed and explained the proposed Gas Infrastructure Clause in Northeast Ohio's 2018/2019 rate filing.

**Oklahoma Corporation Commission**

Docket No. 001345

Presented testimony and prepared the rate filing on behalf of Southern Union Gas Company's 1992 rate request.

**Pennsylvania Public Utility Commission**

Docket No. 2013-2386293

Assisted the University of Pennsylvania with the analysis of Veolia Energy Philadelphia Inc.'s 2013 steam rate case.

Docket No. 2009-2111011

Assisted the University of Pennsylvania with the analysis of Trigen-Philadelphia Energy Corp's 2009 steam rate case.

**Public Service Commission of West Virginia**

Case No. 20-0746-G-42T

Filed testimony on behalf of the Gas and Oil Association of West Virginia Inc. regarding Hope Gas Inc.'s 2020 Application for a rate increase impacting the Gathering class.

Case No. 19-0549-G-BC

Filed testimony on behalf of the Independent Oil and Gas Association of West Virginia Inc. regarding Hope Gas Inc.'s 2019 Application for consent and approval for an asset conveyance agreement with an affiliate.



**Federal Energy Regulatory Commission**

Docket No. RP19-1353-000

Filed testimony on behalf of municipal and LDC customers of Northern Natural Gas' 2019 rate increase  
Section 4 rate increase.

Docket No. RP09-791-000

Assist municipal customers of MoGas analyze issues in FERC 2009 gas transportation rate case.

**City of Austin**

- Presented testimony and prepared filing as well as conducted settlement negotiations associated with Southern Union's 1993 rate request.
- Presented testimony and prepared filing on behalf of Southern Union Gas Company's 1991 rate request.
- Assisted in the analysis of Southern Union Gas Company's 1987 rate request on behalf of the City of Austin.

**City of El Paso Public Service Board**

- Presented testimony and prepared filing as well as participated in the settlement negotiations of Southern Union's 1993 rate request.
- Presented testimony and prepared filing on behalf of Southern Union Gas Company 1991 rate request.
- Presented testimony and prepared the filing on behalf of Southern Union Gas Company 1990 request.

**City of Port Arthur**

- Presented testimony and prepared filing on behalf of Southern Union Gas Company's 1991 rate request.
- Participated in Southern Union Gas Company's 1990 rate request.

**City of Monahans**

- Presented testimony and prepared filing on behalf of Southern Unions Gas Company's 1992 rate request.
- Assisted in the analysis of Southern Union Gas Company's 1989 rate request on the behalf of the City of Monahans.

**City of Borger**

- Prepared testimony and prepared the filing on behalf of Southern Union Gas Company's 1992 rate request.

**City of Borger-cont.**

- Participated in Southern Union Gas Company's 1989 rate request on the behalf of the City of Borger.

**City of Galveston**

- Presented testimony and prepared the filing on behalf of Southern Union Gas Company's 1992 rate request.

**Other Gas Related Engagements**

*City of Laurens, South Carolina*

Developed cost of service and rate design study 2018

*Lower Valley Energy Distribution Cooperative – Afton, Wyoming*

Developed cost of service and rate design study 2017/2018

*City of Clinton, South Carolina*

Developed cost of service and rate design study 2016/2017

***Other Gas Related Engagements-cont.***

*City of Alexandria, Louisiana*

Financial review, allocated cost of service and rate study for the gas system 2012/2013

*City of George West, Texas*

Gas utility rate study 2011/2012

*EPCOR*

Report and analysis of Gas IOU's and their regulation in the State of Texas

*Mitchell County Utility*

Assist with divestiture of gas utility assets

*Hughes Natural Gas*

Ongoing assistance with GRIP filings

*Markwest Energy Partners*

Ongoing transportation rates and regulatory consulting

*Consolidated Asset Management Services (CAMS)*

Ongoing assistance regarding RRC Transmission pipeline issues

*Alamo Transmission*

Assisted with initial tariff development and related cost of service

*Dynamic Energy Concepts Incorporated*

Assisted with the review of gas contracts, tariffs, analyzed usage data and assessed procurement practices for a number of US Veteran Hospitals across the country.